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## ON THE COVER

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# Briefings...

## Late Breaking News - Announcements - Notes

### Thurman Changes Command in Korea



U.S. Defense Secretary Chuck Hagel presents U.S. Army **GEN James D. Thurman**, outgoing commanding general of United Nations Command, R.O.K.-U.S. Combined Forces Command, and U.S. Forces Korea, with the Distinguished Service Medal as Thurman's wife, Dee Thurman, looks on during a change-of-command ceremony in Seoul, South Korea, Oct. 2, 2013. Dee Thurman was also presented the Joint Distinguished Public Service Award. During his 38 years in uniform, Hagel said, Thurman, the Army's most senior active aviator, distinguished himself as a warrior and as a leader in Desert Storm, Kosovo, and during two deployments to Iraq – including command of the 4th Infantry Division. Hagel said Thurman's leadership has made the alliance stronger than it has ever been. "You have made a profound difference in the world," he said. "Your soldiers, their families, and your country will always be grateful for what you and Dee have done for them." GEN Curtis M. Scaparrotti, who led the International Security Assistance Force's Joint Command in Iraq and Afghanistan, and most recently served as director of the Joint Staff, takes over the command. Thurman plans to retire to Texas in November.

### Beyard Tapped for MDARNG Top NCO



**CSM Thomas B. Beyard** has assumed the responsibilities of Command Sergeant Major of the Maryland Army National Guard. He comes to the job from his current position as CSM of the 29th Combat Aviation Brigade, based at Aberdeen Proving Ground, Edgewood Area, MD., a job he has held since 2008. His military career spans over 31 years of service, almost all in Army Aviation. Beyard

has deployed twice to the Middle East – in 2006 as CSM of Task Force AVCRAD 06-08 (Aviation Classification Repair Activity Depot); and 2011 as CSM of Task Force Normandy (29th CAB). As a civilian, Beyard is employed as the director of Housing and Preservation Services and Code for the city of Westminster, MD. He holds a Bachelor of Science degree from Towson University and a Masters of Business Administration degree from Trident University International. Beyard replaced CSM Leroy Hill who retired at the end of September after nearly 30 years of service.

### CCAD & D/3-82nd Avn Tapped for DoD Maintenance Awards

The Department of Defense (DoD) announced on Sep. 27 the 2013 winners of the Secretary of Defense Maintenance Awards for depot and field-level units. These awards are presented annually to recognize outstanding achievements in weapon system and military equipment maintenance. The 2013 Robert T. Mason Depot Maintenance Excellence Award recipient is the Army, UH-60 Black Hawk Recapitalization Program at Corpus Christi Army Depot, Corpus Christi, TX. The program converts and extends the life of the UH-60A aircraft, through equipment overhauls, structural upgrades, and technology and system enhancements to the more advanced UH-60L, giving each recapped UH-60 an additional ten years of service. During 2013, the program completed a record high total of 50 recapped aircraft, while achieving lowered recap costs and shortened turnaround times by 17 percent. A total of six field-level awards are presented in three categories — large, medium, and small. The recipient of one of this year's Secretary of Defense Field-level Maintenance Awards in the medium category is Co. D, 3rd Bn., 82nd Avn. Regt. (Task Force Talon), 82nd Abn. Div., Ft. Bragg, NC. The awards will be presented to the winners at the Secretary of Defense Maintenance Awards Ceremony scheduled for Oct. 30 in the Pentagon Auditorium.

### Corrections:

In the Aug/Sep issue: on page 78 an incorrect photo was shown for the 3rd Bn., 1st Avn. Regt. commander; and on page 95, an incorrect photo was shown for the 28th Cbt. Avn. Bde. commander. We regret the errors and the correct photos are in the online version which will be available to members only in November.



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# Cleared For The Option

**O**ur National Executive Board team has really jelled in the last few months. Committee Chairs have worked on charters for each committee, new members have joined our committees, and several initiatives are underway ranging from a thorough review and analysis of our by-laws to detailed documentation of our Hall of Fame procedures and process in order to achieve total transparency.

Outreach continues to be a top priority. With 70 chapters around the globe it's important to provide the same timely support to each and every chapter regardless of size or location.

Our VP of Membership, CW5 (Ret.) Dave Cooper and VP for Chapter Affairs, LTC (Ret.) Jan Drabczuk have personally reached out to contact our chapters to see how we can better support them.

The National Executive Group is contacting their new counterparts whenever there is a change of chapter leadership. These lines of communication are invaluable as it allows us to share important information on topics like financial support available from the National Office, free Soldier/NCO of the Month membership programs, scholarship facts, and our wide ranging awards program, to name just a few.

Our National Office stands ready to provide responsive and reliable support whenever contacted. Give us a call - we will get back to you quickly.

I also want to bring you up to speed on the AAAA Annual Meeting, May 4-6, 2014, in Nashville, TN. We just held our first IPR on site and have developed some new directions for the event. We are decoupling the professional piece from the AAAA social events and annual membership meeting. Now we will have a professional agenda and an association membership meeting agenda.

The professional program will be the "Army Aviation Mission Solutions



Attendees participate in a question and answer session with MG William T. "Tim" Crosby, Army Program Executive Officer for Aviation (standing on stage), and his eight project managers, during the 2013 AAAA Annual Professional Forum & Exposition, Apr. 12th, in Fort Worth, TX.

Summit," sponsored by the AAAA. We are trimming it from the traditional 3.5 days to 2.5 days and provide three levels of information exchange.

Top level briefings will occur for two hours a day in the large general session room. Mid level Q&A sessions will occur like last year in the very successful large center Army Aviation Community display in the Technology Learning Center, (TLC).

Deep Dive discussions led by subject matter facilitators will take place on general mission areas like maneuver, engagement, intelligence, and sustainment, in rooms we are building in the adjacent exhibit hall to the TLC.

The AAAA membership meeting agenda will also see some changes. The closing banquet on Tuesday night will NO LONGER be formal attire.

We will have a brief annual membership meeting report, followed by dinner and then go right into our A-List entertainment.

The Hall of Fame Induction Dinner WILL BE formal as this is our most significant recognition event of the program and will accord the appropriate honor due our new inductees and

reflect the prestige of the Army Aviation Hall of Fame.

All this will be reflected in our digital registration process which opens on Monday, January 13, 2014. You will also see more information in the December 31st issue of the magazine and via email shortly before we open registration.

A final comment pertaining to awards – our January 1, 2014 deadline to submit nominations for AAAA National awards (i.e., Unit, NCO, Crew Chief, Aviator of the Year, etc.) is fast approaching. We have many highly deserving units and personnel worthy of nomination. Please take the time to make that submission so they have the opportunity to compete.

Join me in establishing the goal of at least one award submission from every Chapter and let's ensure we continue to recognize excellence within our Branch.

Above the Best!



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



## EMARSS, ON APPROACH.

The Enhanced Medium Altitude Airborne Reconnaissance and Surveillance System (EMARSS) provides the U.S. Army flexible and modular multi-intelligence capability to detect and track surface targets with unprecedented accuracy. The prototype has already achieved first flight and continues its flight testing—part of a total commitment to assure the Army of enduring capability and a best-value solution.





## TRUST

By MG Kevin W. Mangum



A UH-60L Black Hawk helicopter crewed by members of 3rd Battalion (General Support), 10th Combat Aviation Brigade, Task Force Phoenix, makes its way through a mountain pass while conducting a personnel movement mission, Sept. 10, in Khowst province, Afghanistan.

U.S. ARMY PHOTO BY CPT PETER SNEDEBERG, 10TH CAB

**A**rmy Aviation's success as a Branch and as an indispensable capability is built upon a firm foundation of trust. Trust is not only the bedrock of our Army profession, it is the glue that binds us to the Nation and its citizens we are charged to defend.

It is the heart of our branch's reputation as an indispensable capability for our Nation and Army. As, arguably, the only aviation force relentlessly focused on and dedicated to honoring a sacred trust with commanders and Soldiers on the ground, we earn it daily.

We can't rest on our laurels; we must continue to earn that trust with each and every mission. As we build on that critical foundation, day by day, we also need to focus on those attributes that make us indispensable to our teammates on the ground.

While not all encompassing, five attributes portray what we bring to the fight (using the acronym TRUST):

### **T**actically mobile, agile and lethal to achieve overmatch

The capabilities we have developed over the years, mastered and employed by competent and committed Aviation Soldiers, provide our commanders an unparalleled ability to provide time, space, reconnaissance, surveillance, security and the ability to decisively mass combat power while conducting distributed operations across a broad front.

Whether supporting offensive, defensive or stability operations, we deliver an asymmetric advantage in the fight.

### **R**apid and responsive to meet ANY mission

We employ a broad range of complementary, tailorable and scalable capabilities to support and enable unified land operations. We are not only

a maneuver force, but so much more.

Our standards-based culture and disciplined, yet agile, approach to business, allows us to quickly meet any mission and respond to changing requirements. All enabled by world class maintainers.

### **U**nconstrained by terrain: extend operational reach and tempo

We provide commanders the ability to strike or employ ground forces throughout the depth and breadth of their operating environment to seize, retain and exploit initiative.

We provide the "air" in air-ground operations that defines the unique and unmatched way the U.S. Army fights.

### **S**ynergizes all warfighting functions

Army Aviation contributes to and enhances all warfighting functions: rapid movement and maneuver in con-



cert with organic and supporting fires; intelligence from reconnaissance and increased fusion gained by operating across multiple ground force boundaries; enhanced mission command extending lines of communication and enabling battlefield circulation; protect forces and secure routes necessary for success in both combined arms maneuver and wide area security; and, provide the most flexible and responsive sustainment options in a distributed environment.

### **Tied by culture, task and purpose to the ground force**

Our task and purpose is to support and serve the ground force commander. We wear the same uniform, endure the same training and enjoy the same culture. We are American Soldiers, proud Army Aviation Soldiers.

As we look to the future, in an uncertain world with complex, hybrid threats and certain fiscal challenges, we must do all we can to maintain this precious trust, hard earned over years of toil in the fight.

We must continue to focus on the training necessary, in both the operational and institutional force, to enable air-ground operations so leaders are competent and confident in their ability to leverage all elements of combat power at the decisive point and time.

We must refine our doctrine to codify tactics, techniques and procedures, developed and mastered in the crucible of combat, and tailor those tried and true concepts to the current operating environment while leveraging advances in technology and capability.

Our formations must be more modular, agile and expeditionary allowing us to deploy and employ tailorable battalion task forces and company teams.

The entire Aviation Enterprise is committed to ensuring Army Aviation continues to be the standard against which others are compared and is wrestling these challenges and many more, every day.

We are all working to ensure our aviation force remains the very best – best equipped, best trained, best orga-

nized, best resourced – in the midst of declining resources.

We can do nothing less for the great men and women we put into harm's way and for those who trust we will be there when they need us. Despite force reductions announced in June, our Army's senior leaders chose to preserve our aviation capability.

As we move forward, we will have the opportunity to pay our fair share, and we will size and organize our aviation force to best meet our Army's needs. That force, thanks to our great Aviation Soldiers, will continue to be the best and will honor the trust we all hold sacred.

Thanks for being and supporting the best! Army Aviation will be an indispensable capability for years to come!

Above the Best!

*MG Kevin W. Mangum is the Army Aviation branch chief and commander of the U.S. Army Aviation Center of*

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# Achieving Spectrum Dominance in the Combat Aviation Brigade

By CW4 Brian S. Filibeck and CW4 Corey M. Swetz

*CW4 Brian Filibeck the Proponent Manager of the Electronic Warfare Branch and CW4 Corey Swetz, the Senior Instructor for Electronic Warfare at Fort Sill introduce the capability of the Electronic Warfare Technician (290A) for combat aviation brigades.*

*This relatively new career field was approved in 2009 and was designed to provide commanders and their staffs with the effects that electromagnetic spectrum can have on operations and how electronic warfare can be used to gain the tactical advantage.*

*With our advanced aircraft reliant on global positioning satellites for precise navigation and munitions delivery, having expert EW support resident in Aviation formations will be critical for future operations.*



*Above The Best!*  
CW5 Reese

Over the last few years, commanders have received Army electronic warfare (EW) professionals into their ranks without a full understanding of how they can contribute to unit mission. In 2013, combat aviation brigades (CAB) will see an influx of EW Technicians (MOS 290A).

It is imperative CAB leadership understand the utilization and expertise of these professionals to enhance the effectiveness of future operations.

Up to this point, CABs relied heavily on the Aviation Mission Survivability Officer (AMSO) (previously referred to as TACOPS Officer) for planned aircraft survivability, to include electronic warfare.

Almost all operations today affect the electromagnetic spectrum (EMS) and need a team of EW professionals that include aviators and EW technicians coupled with intelligence and signal Soldiers to set the conditions for success.



CW2 Marlon S. Atherton conducts EW synchronization with CAB headquarters during combat operations.

With the addition of an EW technician, the AMSO now has a colleague, who can focus on preventing spectrum fratricide by ensuring friendly and enemy EW systems produce only minimal effects on the aircraft EW equipment.

EW in the Army represents the military use of the EMS and directed energy. It has been a rapidly developing and expanding career field across the Army since 2008. Through radio frequency (RF) attacking and sensing, electronic warfare technicians (EWTs) bring options within the EMS to the commander, which ensure friendly systems remain effective while degrading or denying the enemy's ability to use the EMS.

As a force multiplier and a mission enabler EW is not limited to just RF, but includes optical, acoustical, and infrared emissions as well. Although complex in nature, EW must be fully integrated and synchronized with in aviation operations. This is accom-

plished through the coordinated effort of the AMSO, EW, S-2, and S-6 sections in order to achieve its full potential in contributing to mission success. For clarity purposes and to view areas of convergence and divergence a fundamental understanding of each area of expertise is required.

Following are the duties and responsibilities of the EWT and the AMSO. Similarities and areas of overlap between the two are easily distinguishable, but due to wording and description the differences are not as easily detectable.

### EWT Duties

EWTs analyze, plan, organize, integrate, monitor, and assess EW operations, the threat environment, and EW technical requirements. The EWT focuses the efforts of EW systems, both air and ground, against adversary personnel, facilities, or equipment with the intent of denying, degrading, neu-

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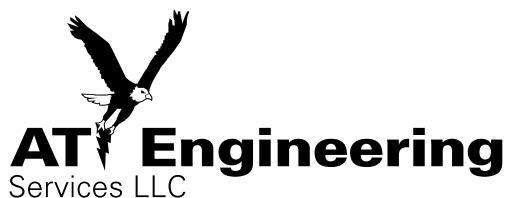
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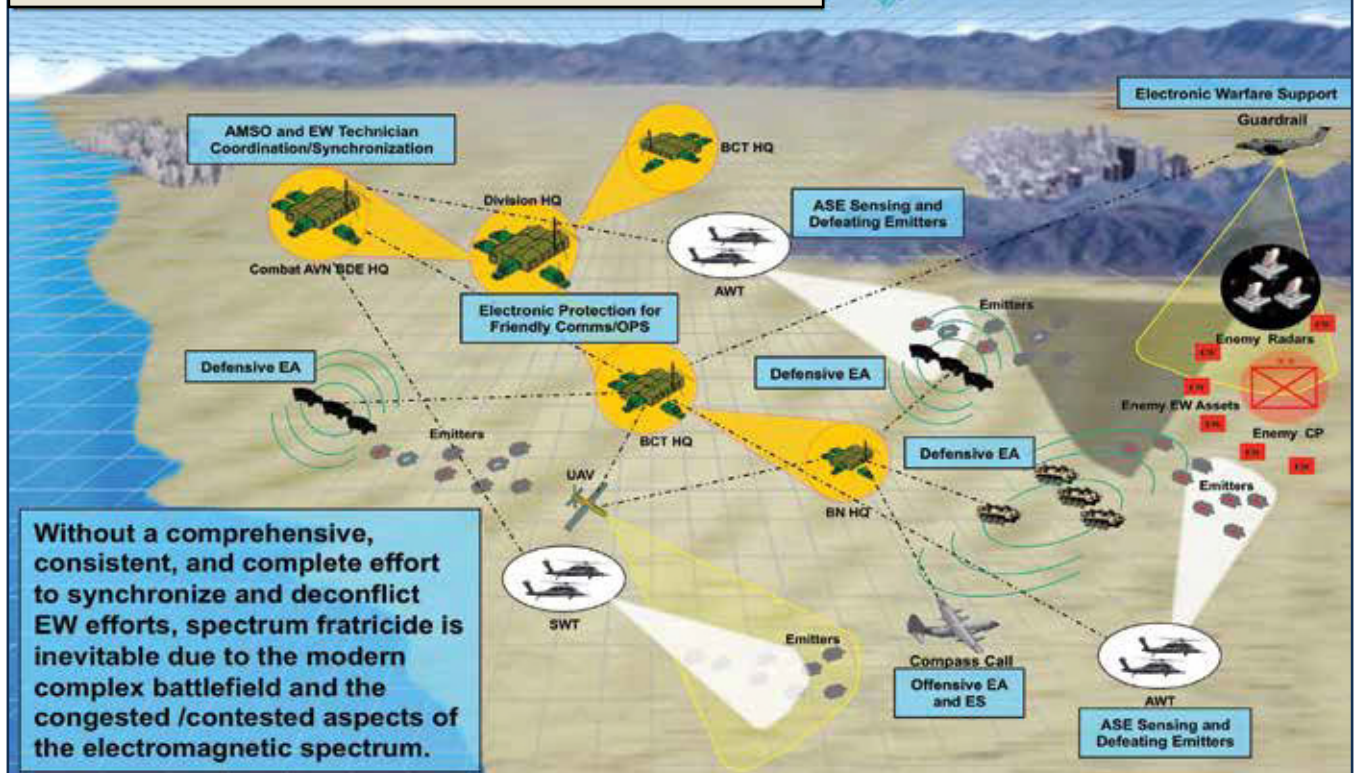
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# The Complex Electronic Warfare Battlefield



Without a comprehensive, consistent, and complete effort to synchronize and deconflict EW efforts, spectrum fratricide is inevitable due to the modern complex battlefield and the congested /contested aspects of the electromagnetic spectrum.

tralizing, defeating or destroying enemy capabilities. They enhance operations through active coordination, integration and de-confliction of EW during mission preparation and execution. The EWT will integrate EW into the targeting and planning process as well as assist in the development of the enemy EW order of battle, EW target information and products, intelligence, and target selection standards.

## EWT Responsibilities

- Advise commanders on capabilities and employment of EW assets
- Monitor Electromagnetic Spectrum (EMS) for indications and warnings enabling immediate threat recognition and targeting
- Coordinate external support for EW mission requirements and integrate EW into planning/targeting processes to include EW Combat Assessment
- Reprogram EW ground equipment
- Quality assurance, quality control and prioritize EW requests from subordinate units
- Assist in training of unit, staff (leadership), and subordinate units in all facets of EW

## AMSO Duties

The AMSO is the commander's primary advisor on aviation mission survivability (AMS). AMSOs conduct

combat survivability analysis and aircraft survivability equipment (ASE) and personnel recovery (PR) program management. The AMSO performs Army Aviation electronic warfare operational planning and Aviation Mission Planning System (AMPS) administration.

The AMSO provides support to the intelligence section's threat analysis, identifying enemy threat capabilities and limitations which affect the commander's ability to conduct aviation missions in the assigned area of responsibility.

## AMSO Responsibilities

- Advise commanders on aviation mission survivability
- Combat survivability and enemy threat system analysis
- Reprogram ASE and recommend ASE configuration
- Integration of joint assets
- Development of aviation TTPs
- Serve as the unit Personnel Recovery Officer within Aviation units
- AMPS administration
- Assist in training members of ground maneuver brigade aviation elements (BAEs) and subordinate unit AMS officers.

## S-2 / S-6

Although key members of the team, they are not focal to this discussion. The S-2 is focused on the collection of intelligence and the S-6 ensures all forms of friendly communications operate effectively and are protected. This relates directly to the electronic warfare support (ES) and electronic protect (EP) sub-categories of EW. Electronic Attack (EA) conducted by the AMSO and EWT has the potential to cause problems with signals intelligence (SIGINT) or collection and communications.

ES should go hand-in-hand with EA so proper cueing can be conducted. If proper coordination and synchronization are not conducted, confidence in the execution of ES and EP is sure to be degraded. Losses of intelligence and communication fratricide are of no benefit to any unit.

It is sometimes neither understood nor clear who is best suited to conduct important tasks based on training and experience alone. This, coupled with units trying to conduct complex missions in unfamiliar territory, can lead to varying degrees of success.

EW is a focal point of contention in aviation due to its complexity and its effect within the EMS, mainly on aircraft communications and system interoperability. The more the EWT knows about ASE and the more the AMSO

knows about other spectrum activity, the better chance that problems can quickly be identified and alleviated.

A greater understanding of how the team (AMSO, EWT, S-2, and S-6) ties together and the much needed overlap should result in excellence in execution.

To efficiently conduct operations in a very dynamic, traffic jammed super-highway known as the EMS, it is imperative that the EWT and the AMSO work together along with the S-2 and S-6. All members of the team need a basic understanding of how ASE works.

The AMSO is lead with the EWT focusing efforts on the effects EW has in the EMS with respect to ASE and other equipment. A concerted effort will maximize ASE effectiveness to protect the aircrew.

### Cross-Over Duties

The following are key cross-over duties that span across several layers of expertise:

- ASE interoperability/synchronization (AMSO/EWT/S-2)
- Reprogramming of ASE/EW ground equipment (AMSO/EWT)
- Electronic Order of Battle (EOB)/ Electromagnetic Operational Environment (EMOE) and its effects on Aviation operations (S-2/AMSO/EWT)
- Joint Restricted Frequency List (JRFL) coordination/deconfliction to include team internal frequencies (prevent communications fratricide) (S-6, EWT, AMSO)
- EW support for security of forward area refuel/rearm points (FARPS)/forward operating bases (FOBs) to include equipment (CREW, Gator, Duke EA, etc.) and personnel (EWT/AMSO/S-2)
- EW support for logistic resupply



WO1 Steven P. Quast prepares EW equipment with proper load set prior to leaving the FOB.

U.S. ARMY PHOTO BY SGT BRANDON BEDNAREK, 4TH BCT, 1ST ARM, DIV, P&O

to the FARPS (CREW equipment and planning) (EWT/AMSO/S2/S6)

- Security for Pathfinder operations (EWT/S-2)
- EW support for PR (AMSO/EWT/S-2/S-6)
- Prevent loss of key/critical intelligence/EA cueing (AMSO/EWT/S-2)

### Summary

In order for EW to become effective in the CABs, commanders and staff must make a conscious effort to integrate these junior grade EWT warrant officers into the team. WO1s are arriving at most CAB units to fill a CPT, CW3, and CW2 slot without much assistance. They need the mentorship of the senior AMSO warrant to fulfill their role.

It is crucial the 290A works closely with the AMSO to ensure the CAB's

EMS footprint is properly coordinated with the JRFL, ground units, and higher headquarters in order to mitigate frequency fratricide.

The 290A needs to be trained on all ASE equipment and have a firm understanding of how it supports the mission to "best" serve the commander. This would give them the needed exposure to the EW systems installed on CAB aircraft and a better understanding of aviation operations. It would also enhance the working relationship between the EWT and AMSOs.

By forming this team of AMSO, EWT, S-2, and S-6 personnel, the CAB will be postured to seize and exploit the initiative to gain and maintain spectrum dominance, while achieving the commander's intent.



CW4 Brian S. Filibeck is currently serving as the Proponent Manager of the Electronic Warfare Branch at Fort Leavenworth, KS; he has multiple deployments to OEF, OIF, and Kosovo and previous assignments include Division Targeting Officer at the 25th and 42nd Inf. Div., Senior Observer Controller/Trainer in 1st Army, and Brigade Targeting Officer at the 10th Mountain Div. CW4 Corey M. Swetz is currently serving as the Senior Instructor for the Electronic Warfare Technician Warrant Officer Advanced Course at Fort Sill, OK; he has three deployments to OIF and previous assignments include Electronic Warfare Technician at the 75th Fires Bde. and as a TACOPS Officer and an AH-64D Maintenance Test Pilot in Germany and at Fort Hood, TX.



WO1 George A. Warner and SSG Sean E. Adkins initialize the Universal Test Set to ensure EW equipment is operating at the proper frequencies.

U.S. ARMY PHOTO BY SFC PHILIP SBILL, 1ST BCT, 25TH INF, DIV.



## Training the Aviation Maintenance Force

By CSM James H. Thomson Jr.

*Our real problem, then, is not our strength today; it is rather the vital necessity of action today to ensure our strength tomorrow.*

– Dwight D. Eisenhower

I recently had the privilege of spending a few days at Joint Base Langley-Eustis (JBLE) in Virginia visiting with the 128th Aviation Brigade and the phenomenally talented team of Soldiers and civilians assigned to the organization.

It was amazing to witness the depth and breadth of their operation masterfully executed around the clock achieving unmatched levels of quality.

For those unfamiliar with the 128th let me start with a little history, lineage and honors of the unit.

The 128th Aviation Brigade was “Born Under Fire” as a provisional unit during Operation Just Cause, Panama in December 1989.

The brigade was later formally activated on January 16, 1990 in Panama where it continued to serve until its inactivation on October 15, 1995.

The 128th Avn. Bde. was awarded the Armed Forces Expedition-Panama Campaign streamer for its participation in Operation Just Cause.

On February 1, 2012 the 128th Avn. Bde. was re-activated at Joint Base Langley-Eustis as the headquarters responsible for Army Aviation’s logistics training mission.

The brigade is comprised of three aviation battalions with a cadre and staff of over 900 extremely competent Soldiers and civilians training 6,200 plus students annually in 77 different



PVT Dustin Westpool, an Advanced Individual Training student assigned to the 2nd Bn., 210th Avn. Regt., repairs CH-47 Chinook flight controls during a class at Joint Base Langley-Eustis, VA, Feb. 20, 2013.

courses both for advanced individual training (AIT) and the track portion of our NCO’s professional military education (PME). The brigade operates three shifts on a 24-hour cycle and has students from 118 different nations in attendance with 11 courses taught completely in Spanish.

The 1st Battalion, 210th Aviation Regiment is responsible for the instructors, writers and training developers that execute and oversee all courses pertaining to attack and armed reconnaissance airframe and armament systems (15R, 15Y, 15S, 15J); electrical and avionics military occupational skills (15F, 15N); and aviation warrant officer technicians (151A). Combined, the dedicated cadre of 1-210th trains over 2,300 students annually.

Similarly, the 2nd Bn., 210th Avn. Regt.’s team of competent and committed professionals provides oversight and executes all programs of instruction for utility and cargo mis-

sion design series aircraft and systems (15T, 15U); powerplant (15B), powertrain (15D), structural (15G), and pneumatic (15H) subsystems; and Latin American courses for multiple MOSs. Each year 2-210th trains more than 3,700 students for the aviation branch and our allies.

The 1st Bn., 222nd Avn. Regt. is comprised of cadre and staff numbering 115, most of whom are staff sergeants and sergeants first class serving as AIT platoon sergeants.

These devoted leaders of character from across Army Aviation give their all to the soldierization process of our AIT student population deftly preparing them to enter our profession and proudly call themselves a “Soldier.”

At any given time, there are some 1,200 to 1,400 AIT students in residence at 1-222nd that are housed, fed, marched to and from school, trained on the warrior tasks and battle drills, indoctrinated with the Army Values and Warrior Ethos, and developed

both physically and mentally to meet the demands of being a Soldier in today's Army.

All the while our AIT platoon sergeants are building and preserving a foundation of trust within these young energetic students who are indeed the strength of tomorrow for our branch. There is no doubt that the leaders of "triple deuce" are making a positive and lasting impact on our newest aviation Soldiers that will set the tone for their Army career.

Nearly 70% of all Army Aviation Soldiers are trained at the 128th Avn. Bde. both as initial entry trainees and as noncommissioned officers attending PME. With just over 600 NCOs assigned to the 128th serving as instructors and AIT platoon sergeants there should be little doubt as to the criticality of this mission or the value of those serving to accomplish said mission.

During my visit, I was extremely impressed with the Army's recognition of and commitment to the 128th's important and complex task at hand by investing significantly into the construction of a new barracks complex and a state of the art dining facility capable of housing and feeding more than 2,000 students concurrently.

The DFAC is actually designed to



U.S. ARMY PHOTO BY SFC KELLY D. BRIDGEMAN

**Students attend the Utility Helicopter Repairer's Course at the 128th Avn. Bde., JBLE, VA on June 20, 2013. (left to right) PVT Tuyen Phan, PFC Miguel Telles, and Airman Donald Sweeney.**

feed a dinner menu to students on the first level while simultaneously feeding a breakfast meal to the night students just starting their shift on the second level of the facility.

If you are reading this and find yourself thinking it might sound like a pitch for NCOs from across our combat aviation brigades to volunteer to serve in the 128th Avn. Bde. sometime during their career, then I have achieved my goal. Our branch does indeed need relevant, competent NCOs of character to serve a two or three year tour of duty at any one of our training brigades throughout the United States Army Aviation Center of Excellence (USAACE).

If as you are reading this you find yourself thinking the branch CSM sounds especially proud of the 128th, you are again absolutely correct.

While I am extremely proud of all of the units across the USAACE, I found my recent visit to JBLE to be a great opportunity to highlight the impressive efforts ongoing at the 128th Aviation Brigade; *your* aviation logistics training center of gravity.

Above the Best!

CSM Thomson

*james.h.thomson4.mil@mail.mil*



*CSM James H. Thomson Jr. is the command sergeant major of the Aviation Branch and the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.*

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# No Season For Risk

By CSM Richard D. Stidley

**A**utumn offers something for everyone. The coming and going of Labor Day means cooler weather, a return to regular schedules with kids back to school, and most of all, the start of football season (my favorite time of year!).

Many Soldiers eagerly await the start of hunting season, while others are ready to start the countdown to time off around the holidays. What we can't look forward to, however, is a "slow" season for safety – just because the summer is over doesn't mean we can fall into complacency.

Soldiers at installations across the southern and western United States enjoy nice weather far longer than those in other parts of the country, and accidents are a good reflection of that. Between Labor Day and Dec. 1 last year, we lost 12 Soldiers on motorcycles; seven were NCOs.

There's no doubt about it – many, many Soldiers will continue riding until the weather forces them off their bikes, and that may not be for several more months.

As leaders, we can't let down our guard on the continuing issue of indiscipline on motorcycles. We must regularly check our Soldiers and ourselves to ensure every ride begins and ends safely.

Autumn and winter are the Army's high seasons for negligent discharges.

Three Soldiers fatally shot themselves between September and December 2012, all under the influence of alcohol and at least two with guests in their homes.

In many ways, young Soldiers are no different than college kids; they're going to congregate together off duty, and there's going to be alcohol involved more often than not.

But Soldiers might feel a little more invincible than the average universi-



U.S. military and civilian contractors watch a football game between the Chicago Bears and the Indianapolis Colts during a tailgate party.

ty student, given our profession and training with firearms.

It's leaders who have to bring them back to earth and show them even superheroes aren't immune to bullets, especially when you're cutting up with friends.

Speaking of alcohol, it's undeniable that some Soldiers try to "enhance" all their off-duty activities with it.

In fact, fixtures of autumn like football games and tailgate parties seem to invite alcohol use. And there's nothing wrong with that, as long as our of-age Soldiers drink responsibly.

Frank discussions about the risks of drinking and driving and even drinking and walking should be part of all our weekend safety briefs.

And, leaders should be walking the talk by setting the standard and being the right example to follow.

It's not about you anymore – what

you do today influences your Soldiers' behavior more than you know.

'Tis the season for accidents, every day of the year. A turn of the calendar won't keep our Soldiers safe, but we can through engaged leadership and a focus on training, discipline and standards around the clock.

The USACR/Safety Center is ready to help with the annual Army Safe Autumn Campaign, available at <https://safety.army.mil>.


Check it out and let me know what you think and how we can better help you keep up the good fight. Most of all, enjoy this fantastic season while it lasts, but always play it safe!

Army Safe is Army Strong!



*CSM Richard D. Stidley is the command sergeant major of the U.S. Army Combat Readiness/Safety Center at Fort Rucker, AL.*





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## U.S. Army Aircraft Survivability Equipment

By CW3 Fernando Ortiz

*This month, CW3 Fernando Ortiz with 1-222nd Bn. gives a breakdown of the aircraft survivability equipment aviation Soldiers are familiarized with and taught to maintain.*

*COL Rigole, Commander*

**T**o triumph over unforeseen conflict now and in the future United States military aircraft have been equipped with advanced technology aircraft survivability equipment (ASE). The focus of ASE has been predominantly for Army helicopters and their crew, due to their high threat and close combat missions in present conflicts.

ASE provides detection and countermeasure systems to safeguard the aircraft and its crew. These ASE systems reduce aircrew fatigue, increase situational awareness and provide superior aircraft lethality.

The elements that comprise the majority of ASE classifications are radar, laser, and infrared (IR) / ultraviolet (UV) detecting, warning, and countermeasure systems. ASE provides 360 degree protection for military aircraft, detecting and identifying enemy weapon engagements.

ASE systems transmit warning commands and displays to the crew station, immediately after identified. With these support devices pilots are able to counterattack the enemy in a timely manner avoiding direct contact from enemy fire. Besides detecting and identifying the enemy, ASE counters the enemy electronically by jamming and decoying their infrared guided or laser aided weapon systems.

Electronic Combat (EC), which is defined as the action taken in support of military operations against enemy electromagnetic (EM) capabilities, consists of three com-



Laser Warning Sensor

ponents: electronic warfare (EW); command, control and communication countermeasures (C3CM) and suppression of enemy air defense (SEAD).

EW uses electromagnetic energy to exploit, reduce or fully prevent hostile use of the electromagnetic spectrum. C3CM is used to counter the enemy or deny the enemy command, control and communications capabilities needed for control of combat forces and to protect our command and control capability. SEAD is conducted to destroy or temporary degrade surface-based enemy air defenses by destructive and/ or disrupted means.

As the enemy improves their methods to successfully attack U.S. military aircraft, the Program Executive Office, Intelligence, Electronic Warfare & Sensors (PEO IEW&S) and companies such as BAE Systems, Northrop Grumman and Goodrich (formerly Hughes) continue to improve and equip our military with the most current high tech and updated ASE.

### AN/AAR-57 Common Missile Warning System (CMWS)

Replacing the legacy AN/ALQ-144 and AN/ALQ-156 systems, the AN/AAR-57 CMWS is an advanced sensor, flare/chaff dispensing system that protects the aircraft from infrared and radar guided missiles. Pilots have the capability to set the CMWS to automatically or manually dispense countermeasures.

Although each aircraft platform is different, the CMWS essentially consists of up to five electro-optical missile sensors (EOMS), an electronic control unit (ECU) and the Improved Countermeasures Dispenser (ICMD) system. The



Chaff Dispenser

EOMS passively detect ultraviolet (UV) energy from the incoming missile or missiles and sends the unique signal to the ECU.

The ECU processes all detected input signals from the EOMS and sends audible warning and visual displays to the crew station.

The ICMD protects against missile threats by dispensing chaff or flares in a pre-programmed order when the system receives a threat signal. The full sequence occurs in less than one second, from detecting to jamming.

Combined with the CMWS is the Advanced Threat Infrared Countermeasure system (ATIRCM); a reliable system currently in use today that has been successful against multiple infrared air defense missile engagements by sending pulses of several frequencies from the sensors that jam incoming heat seeking missiles.

The purpose of these two systems combined is for the CMWS to detect and cue the infrared jamming system to the incoming missiles, and the ATIRCM to counter the attack by discharging a high energy beam of IR to defeat the missile's infrared seeker.

### AN/AVR-2B Laser Warning System

The AN/AVR-2B Laser Detecting Set (LDS) consists of up to six sensor units and an interface unit comparator.

The LDS is a passive laser warning system that receives, processes and displays threat information from airborne and ground laser aided weapons. It sends threat messages to the Radar Signal Detecting Set (RSDS) digital processor. The RSDS is used in conjunction with the LDS to provide a 360-degree field-of-view horizontally and 45-degree field-of-view in elevation protection from laser threats.

The interface unit comparator provides power to the sensor units, processes threats and aircraft interface functions for the system constantly monitoring all sensors for current threat data via detect discrete and the message data link (a non standard asynchronous transmission line).

### AN/ALQ-136(V) Radar Jammer

Commonly used on the AH-64A/D Apache and CH-47 Chinook helicopters, the AN/ALQ-136(V) Radar Jammer is used to confuse enemy radar transmissions degrading return signals to where the data will be useless. The radar jammer consists of a transmit antenna, a receive antenna and a receiver transmitter. The transmit antenna radiates radar frequency jamming signals in the forward sector to counter certain threat radar systems.

The Receive Antenna receives radar threats within the designated frequency ranges and supplies the radar signals to the receiver transmitter (RT). The RT receives signals from the Radar Jammer Receive Antenna and processes them to determine if a threat exists. The Radar Jammer System initiates the assigned jamming signal to counter the radar threat once it receives, detects and processes threat signals.

Aircraft Survivability Equipment – protecting frontline pilots and aircraft against enemy forces with the most reliable and advanced electronic technology across the full spectrum of combat operations.



*CW3 Fernando Ortiz is the executive officer for Company H, 1st Battalion, 222nd Aviation Regiment, 128th Aviation Brigade, Joint Base Langley-Eustis, VA.*

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A UH-60 Black Hawk's common missile warning system fires flares in response to an identified threat.

PHASE COURTESY PHOTO

# PM Aircraft Survivability Equipment Update

By COL John R. Leaphart

I am excited about the opportunity to share with you an update on our progress towards providing world class survivability systems to the Army. Much has been accomplished in the aircraft survivability equipment (ASE) portfolio that will begin to be seen in the near future. Specifically, there are four major efforts on which I want to update you.

## CMWS

First is a major upgrade to the AAR-57 Common Missile Warning System (CMWS). In September, we will start fielding the 3rd Generation Electronic Control Unit (GEN3 ECU) to units in Afghanistan.

The GEN3 ECU comes with three major capability upgrades – a much more powerful processor, improved and expanded threat algorithms, and an initial hostile fire (HF) detection capability for small arms and rocket-propelled grenades (RPGs).

The upgraded processor is a significant increase in both processing power

and memory. Our ability to bring in an improved and expanded set of threat algorithms was completely dependent upon the increase in processing capability. In addition, it gives us the opportunity to insert the Army's first cut at an HF capability.

## ARWR

The next major effort is centered on developing an Advanced Radar Warning Receiver (ARWR). We have a three-phased approach in our overall radio frequency (RF) ASE program.

The first phase is to conduct an obsolescence upgrade to the existing system so that it is maintainable and sustainable for the immediate future. We have that upgrade on contract, the APR-39C(V)1, and will start fielding the heavy lift fleet with that system in FY14.

The next phase is to develop and field an Advanced Radar Warning Receiver (ARWR) that would provide a relevant capability against the existing and future threat. To accomplish this, we are planning on piggybacking on

the Navy's APR-39D(V)2 effort.

We have very common requirements in this mission area. Where they are not identical, the Navy has accommodated the more stringent of the two sets in the specification for the final system. We anticipate being able to field these to the attack fleet in FY17. The final phase will be the development of an RF countermeasure.

One of the reasons we are pursuing the APR-39D(V)2 is that it maintains an upgrade path for an integrated jammer. This provides a clean and low-cost route to get to an RF countermeasure without bringing an entirely new system to the platform.

## IASE

Integrated Aircraft Survivability Equipment (IASE) has been a much desired capability for multiple generations of Army Aviators and is the third major effort we are undertaking.

Our intent is to deliver that capability on the backs of the two efforts I just described to you.

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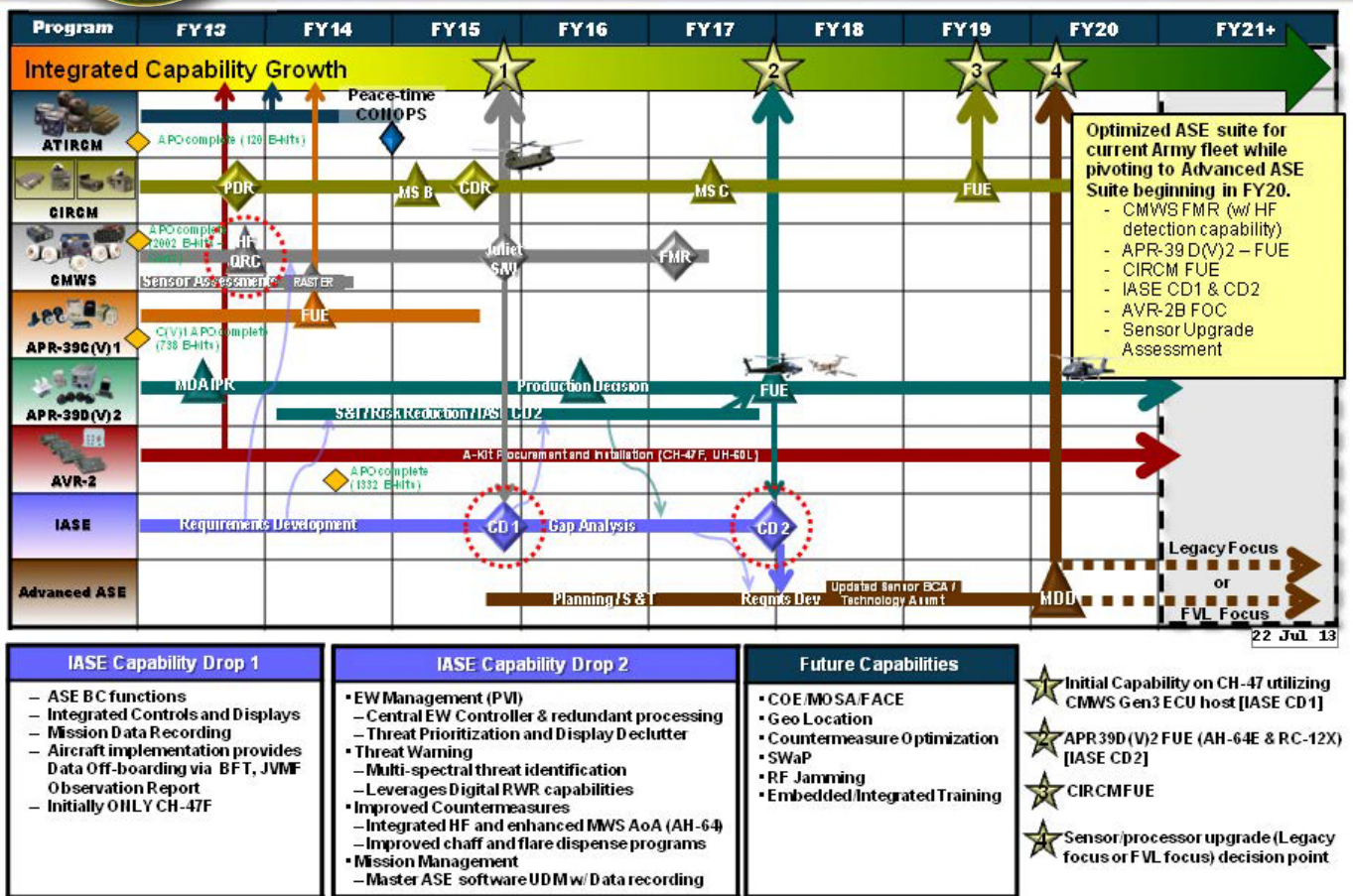
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Photo courtesy of U.S. Army

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# Near Term ASE Roadmap



The upgraded processing capability that comes with the GEN3 ECU allows CMWS to become the dedicated ASE bus/suite controller for the platform. This will make for a much easier platform integration effort, allowing for a greatly enhanced set of integrated controls and displays.

This level of platform integration also facilitates the off-boarding of data via Blue Force Tracker (BFT). This allows threat data generated by the ASE suite on board the aircraft to get into the network where it becomes actionable.

IASE Capability Drop 1 (CD1) will be delivered with the Juliet software release of CMWS on the GEN3 ECU and will make its first appearance on CH-47Fs in FY15.

IASE Capability Drop 2 (CD2) will come with the APR-39D(V)2. That software will provide greatly enhanced EW management for threat

prioritization and display declutter.

It will also add capability for multi-spectral threat identification, as well as improving the countermeasure response through integrated HF and Missile Warning System (MWS) AoA and improved chaff and flare dispense programs. The initial target for CD2 is AH-64Es in FY17.

## CIRCM

The final effort I want to mention is the Common Infrared Countermeasure, or CIRCM. We are in the middle of the technology development phase of the CIRCM program and the performance we have seen on the initial prototypes far exceeds our expectations at this point in time.

This program will begin to show up in the fleet in FY19, with UH-60s being the target aircraft for the initial fielding.

CIRCM will provide an overmatch capability against the existing threat for years to come, as well as provide the modular and adaptable capability required to respond to new threats as they emerge on the battlefield.

## FVL

This leads to a short discussion of Future Vertical Lift. The move to next-generation aircraft will eventually demand a move to next-generation ASE.

We are pushing as hard as we can on the above four efforts to push as much capability out to the existing fleet as we can. That way, in the FY20 timeframe and beyond, we will be prepared to put the bulk of our effort against developing the next-gen ASE suite.

We are making the science & technology investment now to shape that decision. Much effort has been put into

# The Future of ASE

## Moving toward an integrated solution



looking at current and future sensor technology and trying to understand just how much capability can be squeezed out of a single sensor array. For instance, is there a single sensor array that can provide capability against multiple threats while providing capability for degraded visual environment (DVE and other mission areas)?

Can capability be provided to size, weight, and performance (SWaP) constrained platforms through the implementation of a networked ASE capability where data is shared from platform to platform in a real-time fashion?

There are other questions and challenges that must be answered and overcome in order to be successful in achieving the right next-gen ASE suite for next-gen aircraft.

We are trying hard to put the requisite capability into the legacy fleet now so we are prepared to fully focus on next-gen aircraft when the time is right.



*COL John R. Leaphart is the project manager of the Aircraft Survivability Equipment Project Management Office at Redstone Arsenal, AL.*

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# Product Manager Air Warrior

## Update to the Field

SPECIAL FOCUS  
Aircraft Survivability  
Equipment

By LTC Spencer C. Guida and Mr. James R. Isaacs

Under the leadership of the Program Executive Officer Soldier and reporting directly to the Project Manager Soldier Warrior, the Product Manager Air Warrior (PM AW) is the Army's proponent for Aviation Life Support Equipment (ALSE). Fielding of the Air Warrior system is nearly complete, wrapping up in Fiscal Year (FY) 2014 as the 4th Infantry Division's Combat Aviation Brigade (CAB) stands up at Fort Carson, Colorado.

### Why Air SS

Although the Air Warrior system provides aircrews an effective and safe system, with a modular capability to support all mission configurations, ten years of continuous combat revealed capability gaps and limitations no amount of testing ever could.

Nearly one-quarter of aircrew members report trading off some degree of ALSE protection due to flight control interference associated with the bulk of equipment worn on the upper torso in a combat configuration.

The Air Warrior system was developed to effectively support the crewmember for average mission durations of 5.3 hours; but years of combat show mission durations are typically more than double that number.

The combination of extended mission durations and an average weight of 65-85 lbs (configuration dependent) impose significant fatigue and physiological stress on the crewmember.

Rotary wing aircraft mishaps as a result of loss of Situational Awareness (SA), including those caused by a lack of references in a Degraded Visual Environment (DVE), occurred at an alarming rate, costing the Army lives and scarce resources.

Training, experience, and modernized flight controls in digitized aircraft have reduced the incidence of these types of mishaps, but increasing crewmember situational awareness continues to be a challenge. This will be especially important for crews of the 750+ UH-60L aircraft lacking digitized flight control systems that are scheduled to remain in the Army inventory beyond 2024. In response, TRADOC's Program Office-Aviation Brigades, the Army's aviation user representative at Fort Rucker, Alabama tasked the PMAW to

### Helmet and Display Systems

- Improved HGU-56/P as the Common Helmet Platform
- Common Helmet Mounted Display (CHMD) and Headtracker for Aviators with Flight and 3D Degraded Visual Environment symbology

### Integrated Personal Electronics

- Integrated Soldier Power and Data System
- Personal Display Module
  - Mission Display Module (aircraft-mounted)
  - Soldier Computer Module
    - Lightweight Environmental Control System (Kiowa Warrior)
    - Radio Interface Control Module

### Layered Clothing Ensemble

- Improved Cooling Vest
- Heating Elements for Aircrew Torso
- Lightweight Joint Protective Aircrew Ensemble Chemical-Biological Protection
- Lightweight Immersion Suit for Aviation

### Aircrew Proective Ensemble

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- Integated Body Armor and Survival Gear Carriage with Soft Armor Ballistic Insert
- Fully Integrated Personal Flotation System
- Lightweight Composite Emergency Breathing and Supplemental Oxygen Bottles



address these capability gaps by developing a material solution named the Air Soldier System (Air SS).

The highest priorities of the Air SS are to increase cockpit compatibility by reducing the bulk and weight of the ALSE worn by the Army's rotary wing aircraft crewmembers, and to improve the SA of the entire aircrew.

The Air SS will reduce bulk and weight in the critical torso area by integrating and combining the functions of separate items of survival and communications equipment, leveraging leading edge commercial protection technology, and by reducing the number of layers of protective clothing without compromising protection.

Air SS will improve the situational awareness (SA) of the aircrew to reduce mishaps in degraded visual environment (DVE) conditions by fielding a high resolution Common Helmet Mounted Display (CHMD) with magnetic head tracking and enhanced 3D flight symbology and cueing for aviators.

This will provide aircrews greatly improved heads-up SA, while providing an incremental capability to be leveraged by the future comprehensive DVE solution currently



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The Air SS will improve upon all the capabilities of the Air Warrior system, but in an integrated ensemble. In the first delivery of capability, the Air SS will include an improved helmet and display system, a suite of integrated personal electronics, and a new layered clothing ensemble.

The current HGU-56/P flight helmet will be improved to provide an increased Field Of View, an energy absorbing liner and retention assembly.

The legacy ANVS-7 HUD will be replaced by the CHMD, a single day/night/color display with high resolution three-dimensional (3D) SA flight symbology for all aviators except AH-64 Apache.

The Air SS 3D symbology was vetted through continuous demonstration and feedback from Army aviators with recent combat experience as participants in several Air SS Crew Station Working Groups (CSWGs) conducted at the Army Research Lab on Redstone Arsenal, AL.

The CSWG data demonstrated that the Air SS 3D symbology produced a 45% increase in aviator SA, reduced pilot workload by 32%, and reduced DVE-related crashes during the landing phase by 90%. In addition to the CHMD, SA will be increased for UH-60A/L pilots with the addition of two aircraft-mounted Mission Display Modules (MDMs) that replace the Electronic Data Manager (EDM).

These will be high resolution 8" x 4.5" folding displays mounted on the outboard of each instrument panel. In addition to providing current EDM functionality, the MDM can display video input from the sponson-mounted Forward Looking Infrared Radiometer (FLIR) and is high-definition multimedia interface (HDMI) capable for future DVE sensor feeds.

## Personal Electronics Suite

The suite of integrated personal electronics consists of a single body worn processor, display, conformal battery, power manager and a power and data harness, replacing many of the electronic devices currently mounted to the body along with their disparate displays, processors, and batteries. The aircraft will provide the primary power source, while the 72hr conformal battery is simultaneously charged for dismounted operations.

The Soldier Computer Module (SCM) will control all electronic devices while still providing all the functionality of the current EDM. This will be controlled via the Personal Display Module (PDM), a smart-phone sized touch screen display worn by all crewmembers, both rated and non-rated, as the single user input and control.

The power manager distributes the correct voltage from either aircraft power or the new conformal battery to each of the crewmembers' individual electronic devices via a ruggedized ribbon cable harness that attaches to the current AW Primary Survival Gear Carrier (PSGC).



**Air Soldier System 3D Degraded Visual Environment (DVE) flight symbology, as displayed to the aviator through a Helmet Mounted Display (HMD) during the July 2013 Crew Station Working Group at Redstone Arsenal, AL.**

## Capabilities

The initial delivery of Air SS will significantly reduce bulk and weight through a new layered clothing ensemble using the latest in textile technologies and combining the functionality of multiple items.

A new Soft Armor Ballistic Insert will save over three pounds as compared to the current AW soft armor while providing the same level of protection.

Functionality of items will be combined with new standardized 72 hour survival items, including the introduction of a folding survival/escape knife to replace the current Aircrew Survival Escape Knife; an improved cooling vest that is as thin as a performance T-shirt; a Lightweight Immersion Suit for Aviation providing cold water immersion protection; Heating Elements for Aircrew

Torso (HEAT), delivering commercial active (powered) warming technology to the crewmember's upper torso; and a Lightweight Joint Protective Air Crew Ensemble for chemical and biological protection with reduced bulk.

In the follow-on delivery of capability, a new Aircrew Protective Ensemble (APE) will replace the current PSGC, with the suite of personal electronics now fully integrated into the APE, including a new Radio Interface Control Module (RICM).

The RICM will replace both the current Combat Survivor Evader Locator survival radio and the Encrypted Aircraft Wireless Intercom System Enhanced Mobile Equipment radio by combining their functions into a single, small form factor, with user interface and control through the PDM.

At this point, the PDM will also display full EDM functionality from the SCM to the rear crewmembers of utility and cargo aircraft, providing them with the same SA as the pilots. Added capability provided by the APE includes body armor directly integrated with the survival gear carriage; elimination of the body mounted life raft; a personal flotation device as an integral part of the gear carriage system as opposed to a clip-on attachment; and higher capacity emergency escape breathing devices with reduced size and weight.

Development of the Air SS began in FY12, and the first delivery of capability to the field is scheduled for FY15. Fielding is scheduled for three combat aviation brigades per year.

*LTC Spencer C. Guida is the Air Warrior Product Manager and Mr. Jim Isaacs is the PM Air Warrior Program Integration Principal, both located in Huntsville, AL.*





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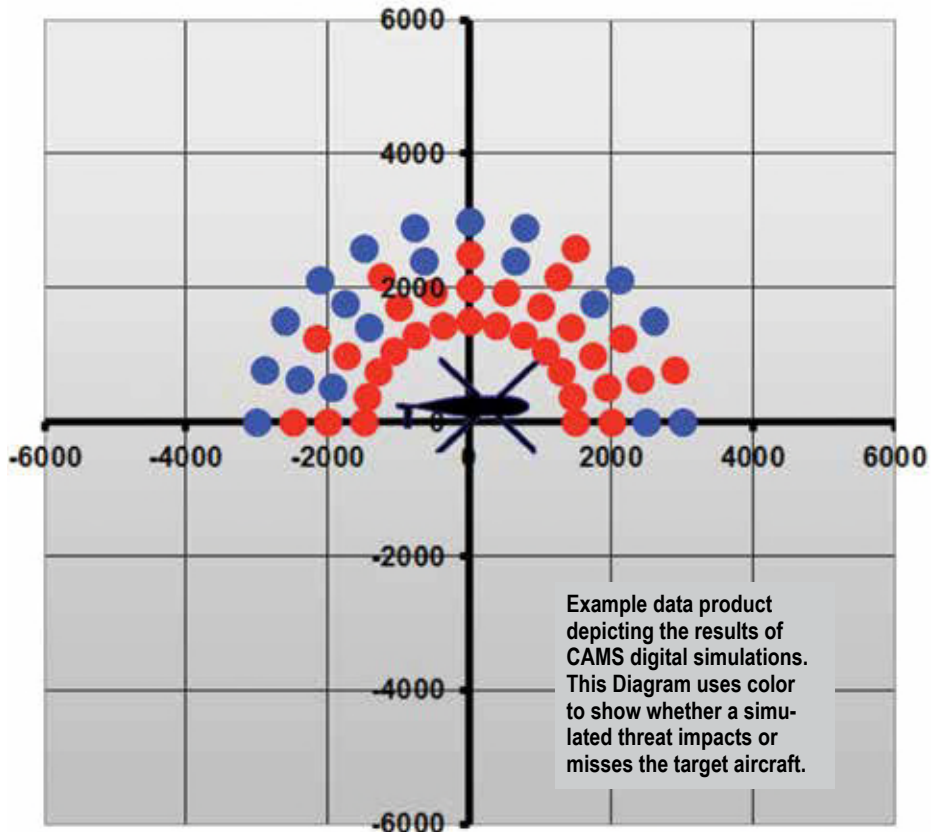
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Aircraft Survivability Equipment

# Ensuring the Survivability of Army Aircraft

By Mr. Mark J. Calafut and Dr. Leslie Litten



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**O**n the modern battlefield, Army aircraft encounter a wide variety of hostile threats, ranging from ballistic munitions to sophisticated guided missiles. Within this broad threat-space, man-portable air defense systems (MANPADS) are unique in their combination of effectiveness, portability, and proliferation.

Principally, MANPADS are small surface-to-air missiles that can be transported and launched by a single operator. After a MANPADS operator establishes an aircraft as the target, the missile is fire-and-forget and will autonomously fly to intercept. Hundreds of thousands of MANPADS have been built worldwide and the threat systems are currently produced by dozens of different countries.

Historically, Army aircraft have been protected from this prolific threat by employing countermeasures that disrupt the tracking system of an incoming missile. This disruption causes the incoming missile to lose track of its target and fly to an incorrect location.

Although conventional MANPADS



The above diagram depicts the CAMS red and blue team approach.

have existed for decades, recent advancements in electronics and sensor technology are leading to the development of a new class of emerging MANPADS. These threats will have enhanced capabilities, including improved ability to track targets, increased hit point accuracy, and superior resistance to aircraft countermeasures.

As the Army develops its next-generation aircraft survivability equipment (ASE), its scientists and engineers are considering not only the capabilities of current threat technology, but also the expected evolution in capabilities of

future threats. This forward-looking research and development process is essential to ensuring the long-term survivability of Army aircraft.

### Counter Advanced MANPADS (CAMS)

The Army's Communications-Electronics Research, Development, and Engineering Center (CERDEC) is currently leading science and technology (S&T) programs to ensure the protection of aircraft against advanced threat systems.

In the Counter Advanced MANPADS S&T program, CERDEC en-

gineers and scientists are specifically developing ASE technologies to defeat emerging MANPADS.

The research and development process in the CAMS program is inherently different from the traditional countermeasures development process. Typically, countermeasures are developed by characterizing existing threat systems and identifying specific vulnerabilities.

In creating countermeasures to future threats, threat hardware is still in development and is unavailable for characterization or testing.

To overcome this challenge, CERDEC is implementing the CAMS program using a competitive red and blue teaming approach. This novel approach to countermeasures development has jump-started the research process and is allowing the Army to remain ahead of emerging threat technology.

### CAMS Simulation Environment

The CAMS S&T program is executed in a state-of-the-art countermeasures development laboratory at CERDEC facilities in Aberdeen Proving Ground, MD. The CAMS laboratory serves as the primary simulation en-

vironment in the CAMS program and provides the core capability to assess the effectiveness of countermeasures.

It is capable of realistically simulating the flight of aircraft and missiles using a combination of digital models and hardware systems.

In the laboratory environment, missile flight conditions are replicated using a 3-degree of freedom flight motion system and representative scenery is generated using a high-fidelity scene projection system. The CAMS laboratory can be configured to simulate a variety of aircraft, flight profiles, and engagement geometries.

This versatility allows CAMS engineers to collect statistical data on the performance of countermeasures over a wide range of test scenarios. Within the CAMS program, these capabilities are essential to implementing the CAMS Red and Blue team competition.

### CAMS Methodology

The CAMS program is structured as a team-based competition that occurs within the laboratory simulation environment. The program involves three engineering teams, each with different objectives and skill sets. Two of

these teams, the CAMS Red Team and the CAMS Blue Team, act as competitors within the simulation environment, while the third team, the CAMS White Team, functions as the independent evaluator of the competition.

Gradually, throughout the program, the CAMS White Team adjusts the test conditions of the competition, forcing the Red and Blue Teams to adapt and improve. This process of iterative improvement leads to the development of robust and effective countermeasures.

### CAMS Red Team

Within the CAMS development competition, the CAMS Red Team is responsible for anticipating and simulating the capabilities of emerging MANPADS. This requires the Red Team to thoroughly understand not only the technologies associated with emerging threats, but also the approach and mindset of MANPADS developers around the world.

The CAMS Red Team collaborates directly with intelligence centers and other government agencies to characterize the major trends and priorities in the MANPADS development community.


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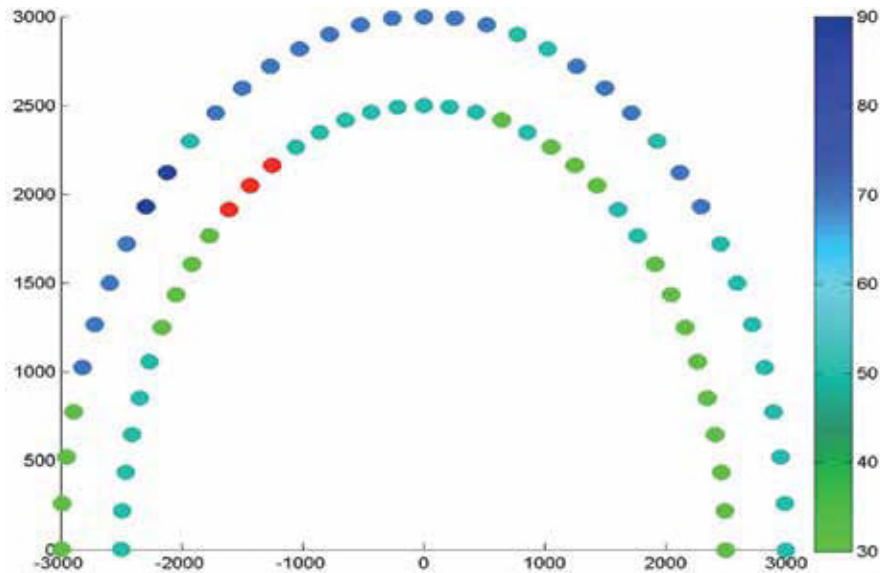
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Example data product depicting the results of CAMS digital simulations. This diagram uses color to show the degree by which a simulated threat misses the target aircraft.

The Red Team also identifies fundamental trends in the development of threat component technologies by reviewing relevant open-source literature, academic publications, and patents.

Subsequently the Red Team applies subject matter expertise to build software and hardware threat models that are tested in the CAMS laboratory. These models are designed to be re-programmable and adaptable, allowing for rapid implementation of a wide range of threat representations.

### CAMS Blue Team

In parallel, the CAMS Blue Team is responsible for developing novel countermeasures that can effectively defeat Red Team threat models. This requires the Blue Team to understand current countermeasures technologies and to upgrade or modify them to defeat emerging threats.

The Blue Team initiates the development process by researching signal processing and threat tracking fundamentals. It identifies essential components that are present in all emerging MANPADS.

Based upon this framework, the Blue Team is now developing countermeasures that attempt to disrupt these essential components.

This approach allows the CAMS Blue Team to create general-purpose countermeasures with potential effec-

tiveness against a broad spectrum of the Red Team threat models.

### CAMS White Team

The CAMS White Team is responsible for managing the Red and Blue team competition and evaluating the performance of each team. This requires the White Team to simultaneously test Red Team threat models and Blue Team countermeasures in the CAMS laboratory environment.

On a bi-monthly basis, the CAMS White Team collects the most recent threat models and countermeasures from each team to prepare for the evaluation process.

The CAMS White Team then designs test scenarios that represent realistic aircraft flight conditions, executes the tests in laboratory simulation, and compiles statistics on the performance of each team.

Following this evaluation period, the CAMS White Team provides detailed feedback to each team to help guide the development process and improve each team's performance.

Over time, the CAMS White Team analyzes aggregate results and draws long-term conclusions on the most effective and robust countermeasures.

### CAMS Data Products

The CAMS program provides a variety of valuable data products, including long-term statistical data and

detailed countermeasure assessment reports. However ultimately, the most significant data product of the program is the CAMS countermeasures database. This database of effective countermeasures techniques and technologies includes direct associations to specific Red Team threat models.

As emerging MANPADS begin to proliferate and are characterized, effective countermeasures will be identified from the CAMS countermeasure database. This will greatly reduce the lag period between the fielding of new threats and the availability of effective countermeasures for Army aircraft.

### Conclusions and Future Work

Throughout the Counter Advanced MANPADS program, CERDEC has placed an emphasis not only on exploring novel approaches for countermeasures development but also for reducing costs and working efficiently.

This has included collaborating with other laboratories and international partners to share laboratory assets, complete joint testing, and exchange analysis tools and documentation.

As critical S&T programs for aircraft survivability continue, CERDEC welcomes the opportunity to work collaboratively with new government agencies and industry partners.

Through the exchange of technical ideas and technologies, the next-generation of ASE will be developed efficiently and effectively, and the long-term survivability of Army aircraft will be ensured.

◆◆◆  
*Mr. Mark J. Calafut is the chief of the Electronic Warfare Systems-Futures Branch and Dr. Leslie Litten is the division senior engineer of the Electronic Warfare Air/Ground Survivability Division, Intelligence and Information Warfare Directorate (I2WD), U.S. Army Communications-Electronics Research, Development, and Engineering Center (CERDEC) at Aberdeen Proving Ground, MD.*



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During an awareness visit, ARAT engineer uses a portable simulator to demonstrate the APR-39 A(V)1 and CMWS systems to the Rhode Island ARNG.

ARAT COURTESY PHOTO

# The Army Reprogramming Analysis Team: Still Supporting Soldiers and Electronic Warfare During Change

By Mr. Michael J. Crapanzano

**E**lectronic Warfare (EW)...and the new Cyber-Electromagnetic Activities (CEMA) concept currently being defined...are critical capabilities that Soldiers require to win in today's operating environment and within our Army's operating concept.

The EW systems on Aviation and ground platforms will be as indispens-

able to successful land operations in the future as they are today.

However, the speed, accuracy, and agility required to modify those systems because of changes in threat capabilities is almost as critical.

The U.S. Army Communications-Electronics Life Cycle Management Command (CECOM) understands this tenet of supporting the warfighter.

In fact, CECOM serves as the critical link for reprogramming software in all Army EW systems.

Utilizing its rapid reprogramming infrastructure, CECOM's Army Reprogramming Analysis Team Program Office (ARAT) develops, delivers, and sustains software for electronic attack, support, and protect systems as well as other electromagnetic spectrum capabilities to afford commanders freedom of maneuver within the electromagnetic spectrum, recently termed the Cyber Domain.

Even while budgets and deploy-

ment presence contract, the ARAT mission and the scope of its efforts with CECOM's Software Engineering Center (SEC) are expanding as Army developers and sustainers realize that the ARAT affords them an efficient and effective means to maximize resources – the ARAT saves time and money.

Even with its success, the ARAT is adapting its organizational processes and infrastructure to even further increase efficiencies while still meeting its core responsibility of giving Soldiers the most capable system possible...even as we collectively adapt to the changes for the Army of 2020 and beyond.

### The ARAT Mission

CECOM's ARAT is chartered by the Headquarters, Department of the Army and as prescribed by Army Regulation (AR) 525-15, is the U.S. Army organization responsible for repro-



ARAT hardware technician utilizing the Baraga test set to trigger CMWS.



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ARAT assistant project lead prepares to test the AN/APR-39B(V)2 system with the AMES II RF Simulator.

gramming software in all Army EW systems.

The ARAT charter establishes the organizational elements needed to carry out its mission of proactively supporting Army operations.

That support is accomplished by providing the appropriate and timely notification of a change in the threat EW environment and that a valid reprogramming requirement exists.

After completing an analysis of the threat emitter, a system's software is modified and reprogrammed aviation mission data sets and ground EW threat loads are disseminated to EW system operators using a classified distribution and communications infrastructure.

In addition, the ARAT Operations Center provides 24/7 reach back assistance to the warfighter. Joint warfighters who use EW systems are the ARAT's primary and ultimate customer.

In keeping with that responsibility and in alignment with the Army Materiel Command and CECOM Strategic Plans for supporting joint warfighting superiority through world-class glob-

ally networked C4SIR systems, the ARAT has five mission requirements:

*Reprogramming Infrastructure Development* – Develop, establish, and equip a software rapid reprogramming infrastructure capable of responding to changes in threats systems within the time periods specified in AR 525-15, Software Reprogramming Policy for Electronic Warfare and Target Sensing Systems.

*Threats Analysis* – Continuously analyze threat data to identify new, modified, or changed threat system electronic signatures that may affect U.S. reprogrammable EW systems.

*System Impact Analysis* – Assess the impact of new or changed threat signatures on friendly EW systems and make recommendations concerning possible changes to hardware, software or tactics.

*Mission Software Reprogramming* – Develop and validate mission reprogramming software to counter the new or changed threat signatures in support of Army operations and tactical regions.

*Mission Software Distribution* – Provide a communication means to distribute or make readily available the new reprogramming mission software and corresponding supporting data from CONUS to Soldiers operating the fielded force protection systems.

Included in this mission requirement is providing units the data entry capabilities they need to install the mission software into their EW systems. This critical step is normally accomplished using ARAT-provided Mission Loader Verifier software, called the ARAT Survivability Software Loader, which is incorporated within the Aviation Mission Planning System.

## Organization

The ARAT EW system support infrastructure includes cells at Fort Rucker, AL, supporting the U.S. Army Aviation Center of Excellence; Huntsville, AL, supporting the Program Manager, Aircraft Survivability Equipment, and the Program Executive Officer, Aviation's platform PMs; Patuxent River, MD, supporting U.S. Navy and Army Research Laboratory PM activities; Yuma Proving Ground, AZ, supporting ground-based system field testing; Atlanta, GA, supporting research and development activities that contribute to EW and rapid repro-

gramming initiatives; and Washington, D.C., supporting the Department of the Army, G-3/5/7, Electronic Warfare Division.

Also included in this organizational structure is the Flagging Office at Lackland AFB, TX, and Threat Analysis operations also located at Fort Rucker.

## Effective Solutions

As the Army designs regionally aligned, scalable and tailorable formations, and Army Materiel Command (AMC) ensures its organizations sustain units for Full Spectrum Operations, the ARAT continues to develop and support the software required by the EW systems in those formations.

This effort is augmented by the ARAT supporting program managers as they simultaneously field, modernize and sustain the current array of aviation and ground EW systems, as well as assisting PM's in their development of new systems.

As a result, the ARAT is in the early stages of EW system planning, design, and development in an effort to create sustainment efficiencies after system fielding.

As part of the CECOM Strategic Plan to drive enterprise processes to provide life cycle support to Soldiers, the ARAT recognized that all Army Aviation Mission Survivability Officers (AMSOs) and Electronic Warfare Officers (EWOs) supporting the reprogramming of EW force protection systems were affected as a result of restrictions of Communications Tasking Order 10-133 (CTO 10-133) and its prohibition on the use of removable media as well as CTO 10-084 that prohibits the use of USB and flash media devices.

The ARAT sought and received Army-wide approval for the 5,500 AMSOs and EWOs to use removable media (specifically CD/DVD) and the Common Missile Warning System (CMWS) personal computer memory card international association (PCMCIA) card for the rapid reprogramming of their aviation and ground EW systems.

The ARAT has created instructions for AMSOs and EWOs to utilize the approved CTO 10-084 for the CMWS PCMCIA card and CTO 10-133 enterprise waivers.

Contact the ARAT for copies of the waivers and instructions,



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ARAT Engineer testing the RFIS system with the Micro AMES RF Simulator.

or for any questions regarding this issue (NIPR: [arat@sec.army.mil](mailto:arat@sec.army.mil)/SIPR: [arat\\_admin\\_team@arat.army.mil](mailto:arat_admin_team@arat.army.mil)) or phone 443-861-3592/3593 DSN: 848.

### Moving Forward

As the U.S. Army moves into the next evolution of changes, it is critical that CECOM's ARAT collectively develop processes that provide the Army with the ability to maintain EW systems through operationally effective and fiscally efficient software reprogramming.

Whether it is the migration of sustainment from original equipment manufacturers to an Army organic capability...or the Army bringing this cost-efficient model to Aviation User Data Modules and Operational Flight Program reprogramming efforts...or Counter Radio Controlled Improvised Explosive Device Electronic Warfare loadsets...there must be a collective and concerted effort to save the Army money while still providing the Soldier a more robust tactical solution.

It should not be considered an "either-or" problem – rather, it must be an "and" solution.

The Army has recently defined the concept of CEMA within its doctrine and is now determining the linkages between the three interrelated lines of effort.

As in most conceptual initiatives, there is a level of confusion, uncertainty, and gaps in how cyber, EW,

and electromagnetic spectrum operations should, and must, be integrated. Accomplishing that during a period of reduced budgets will make the task even more difficult. However, in spite of the challenges, there are also unprecedented opportunities rapidly approaching decision makers in both the Army and in industry.

The Army will use CEMA to affect future outcomes. A dialogue must start now and that dialogue must be broader than just CEMA.

It must include the requisite convergence of CEMA-enabling functions, such as intelligence collection and vetting, the efficacy of the Army software reprogramming infrastructure, the preponderance of federated systems on our aircraft in a time when open architectures are vital, and the availability of the Global Information Grid (GIG) countered by the need to defend it against attack.

These are just some of the overarching CEMA "enterprise" conversations that must also commence.

The Cyber Domain, using the electro-magnetic spectrum, will be the next warfighting domain where the Army will need to ensure superiority and afford commanders freedom of maneuver. EW systems and rapid reprogramming capabilities can and will be adapted to ensure that an AMSO or EWO has the software and informational awareness required to support those commanders.

Whatever CEMA-based systems

are fielded, CECOM's role of providing the Army a single manager of joint tactical command, control, communications, computers, intelligence, surveillance, & reconnaissance (C4ISR) systems, as well as being a value-added member of the Army IT community, will be a critical link to that modernization effort.

Army Aviation has been on the forefront of innovation and employing technology to defend our nation.

The coordinated partnership between system program managers, defense industries, academia, research and development organizations, requirements proponents, and capability managers leverages existing infrastructures into a cooperative enterprise methodology that offers enhanced, economical and software engineering solutions that can be rapidly delivered to U.S. Army air and ground forces.

That is, if a system's software is going to be reprogrammed at a time and in a manner that allows the Warfighter to seize, retain and exploit an advantage over our enemies in the Cyber Domain, then agility...speed...and the entire architecture that facilitates it, must also be addressed and defined.

The men and women of the CECOM's ARAT will continue to improve the EW/CEMA rapid reprogramming infrastructure, as well as their performance, their outputs, and the effectiveness of the systems they support so that Aviation Soldiers can continue to provide their superb warfighting capability to America's Army.



*Mr. Michael J. Crapanzano is the program officer of the Army Reprogramming and Analysis Team (ARAT) and deputy director of the Intelligence, Surveillance, and Reconnaissance Directorate, Communication-Electronics Life Cycle Management Command (CECOM) Software Engineering Center (SEC) based out of Aberdeen Proving Ground, MD.*



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## Aviation Mission Survivability



An AH-64D Apache launching flares during a Man-portable Aircraft Survivability Trainer (MAST) test at Yuma Proving Ground, AZ.

# Preserving Aviation Combat Power

By CW5 Michael S. Kelley

U.S. ARMY PHOTO BY CWS MICHAEL S. KELLEY

**H**istorical Perspective - Employment of aviation capability provides tremendous impact to the balance of forces on any battlefield as evidenced when balloons were introduced for observation and adjusting field artillery fires.

The introduction of manned aircraft changed warfare and ever since, man has been designing methods of destroying the opponent's aviation force. From installing machine guns on aircraft for direct action to the introduction of man-portable surface to air missiles during Vietnam, the methods used to target aircraft continue to advance.

Addressing this threat during the early days of aviation included designing aircraft capable of withstanding weapons effects. Most combat aircraft developers today will agree this is a course of action with diminishing returns. Exchanging fabric encased aircraft with sheet metal and wood structures with titanium is fairly straight forward; hardening the aircraft structure with full armor results in significant size, weight, and power issues.

Hence, today's combat aircraft are designed with vulnerability reduction as a part of the engineering process re-

sulting in a more survivable scenario if hit with a weapons system.

During the 1980s there was considerable discussion within the Army aviation community concerning surviving the hostile environment encountered on battlefields.

In the October 1984 issue of "Aviation Digest," CW2 Charles Butler authored an article titled *Threat Air Defense*. At the time, he was assigned to the Threat Branch at Fort Rucker, AL.

In his article, he mentions "Knowledge of the enemy, knowledge of his weapons and of their capabilities" was something no aviator should leave home without.

CW2 Butler lists Threat Air Defense Countermeasure Rules, the first of which establishes the goal of denying the enemy the ability to acquire targets. In closing his article he states "Though threat air defense should command our respect, it is hardly unbeatable. By realistic training, a true awareness of the threat and proper use of counter-measures, this giant can be cut to size."

CW2 Butler listed several passive and active counter-measures which continue to hold value today. The sur-

vivability scenario is enhanced with additional installed equipment capable of warning the aircrew through detection and displays.

Some of these systems provide decoys to the inbound threat systems through automatic expendables or aircrew action. The development of these survivability systems is essentially a never ending process because advancements in threat systems is an ever evolving industry.

The recent combat experiences during prolonged conflict in Afghanistan and Iraq have produced some meaningful tactical skills while at the same time allowed others to atrophy.

These operations pitted Army Aviation against an enemy with limited surface to air capability. The integration of an advanced infrared threat countermeasure system produced a large population of aviators more reliant upon systems and less reliant upon tactics.

There seems to be a prevailing attitude among many aviators today if you simply turn the aircraft survivability equipment (ASE) on, it will take care of you.

Certainly, our ASE systems have proven largely successful against an

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**A Man-portable Aircraft Survivability Trainer (MAST) with Weapons Engagement Signature Simulator (WESS) engaging a UH-60 at Ft. Hood TX.**

enemy with no air power or effective surface to air threat systems.

Facing an enemy with advanced integrated air defense systems (I-ADS) and a robust command and control capability would most likely result in a catastrophic outcome.

### **Aviation Mission Survivability Training**

The Army Aviation Mission Survivability (AMS) program is a holistic approach to preserving aviation combat power. During initial training as aviators at the U.S. Army Aviation Center of Excellence (USAACE) and initial readiness level progressions at the units, aviators focus on the technical aspects of employing their assigned airframe.

Individual tasks are practiced and evaluated both in scope of the evaluator-trainee perspective and complete one task prior to moving onto the next.

Once an aviator or crew member achieves readiness level one, they are partnered with experienced pilots-in-command and other aircrew as appropriate. Following this, the unit survivability officer begins to add scenarios to already scheduled training flights.

Crew level training encompasses the understanding of aircraft survivability equipment capabilities and limitations, employment of the aircraft, and an understanding of threat systems. This relates specifically to

own-ship protection.

Once all personnel are trained as integrated aircrew the unit training advances to collective scenarios.

Collective scenarios should be related to the unit's Mission Essential Task List (METL) and incorporated into every training mission. Commanders should leverage their AMS officers (AMSO) to prioritize this effort.

The most effective piece of aircraft survivability equipment on-board our aircraft is the aircrew.

Scenario based training events within simulation and in the actual aircraft are critical to achieving reflexive immediate actions on contact, safely executed with precision. Simply stated, tactics are used to deny our enemies the ability to effectively engage aircraft with threat systems.

When tactics fail and the enemy gets a shot, it is imperative to properly identify the threat system being used and select the most effective maneuver to counter the threat system's effectiveness.

Improperly identifying the threat system typically results in incorrect counter-tactics often exacerbating the threat risk. With weapon fly out times measured in seconds, aircrew must be trained to immediately identify threat systems based on ASE indications and visual signatures presented.

They must instinctively select the proper tactics, techniques, and pro-

cedures (TTP) to prevent or mitigate weapons effects while keeping the aircraft safe from obstacles.

This consideration is not limited to the aircraft whose ASE detected and declared the threat. Since all aircraft in a flight formation operate with essentially the same tactical employment techniques, the instinctive reaction is required for all aircraft in the flight regardless of which aircraft was initially targeted.

Failure to employ this methodology may result in subsequent aircraft in the flight being targeted by threat systems. These tasks must be accomplished during an engagement scenario where there is little time to contemplate solutions.

Therefore, the training scenarios must be presented in as close to real-world engagement solutions as possible and include AMSO evaluation of the crew and collective responses.

### **Training Devices Designed to Enable Commanders**

The challenge for aviation commanders is to refocus a cohort of seasoned aviators, with over a decade of combat experience from counter-insurgency missions to a decisive action fight. The desired end-state will be to maximize the preservation of aviation combat power while providing the ground maneuver force capable and continued lethal air support and robust re-supply capability.

In order to achieve the desired end-state in a fiscally constrained environment, commanders must rely upon simulation and aircraft embedded threat emulation systems to create realistic training environments with peer and near-peer enemy force structure.

These systems must generate threat capability as close to real-world systems as possible.

The Aviation Combined Arms Tactical Trainer (AVCATT) was recently upgraded to integrate installed aircraft survivability systems, including hostile fire indicator (HFI).

Fielding this capability provides aviation commanders the ability to train HFI in simulation prior to first unit equipped with the actual system.

Threat system visual signatures were modeled with more realism making them usable to train aviators to accurately identify threat systems engaging them.

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identifying a man-portable air defense system (MANPAD) in a picture to how it actually looks when fired. Commanders can use these systems to ensure assigned aircrews are fully trained as individual crews and collectively. The after action review (AAR) capability supports a discussion based evaluation of crew and collective reaction of an ambushed "aerial convoy" or flight.

The Man-portable Aircraft Survivability Trainer (MAST) became a program of record in first quarter FY13.

With its fielding to the combat training centers, participating aviation units now have a system which interacts with installed Common Missile Warning System (CMWS), providing declaration to the aircrews and a visual signature for positive reinforcement of confidence in the system.

The MAST includes an adjudication capability emulating a more realistic probability of kill when CMWS is operational.

In the article titled *Combat Imperatives Help 101st CAB Flightcrews Accomplish Mission* found in the July-September 2013 issue of Aviation Digest, the authors discuss critical elements concerning combat losses.

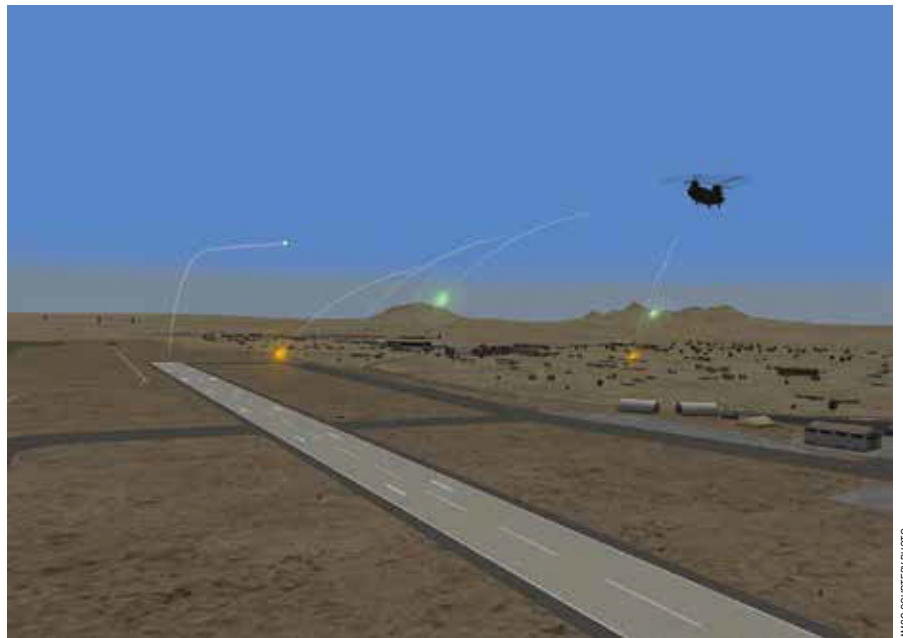
The factors presented are, in part, due to lack of routine application of evasive maneuver techniques during training flights at home station.

If the unit trains at a three to five rotor disk separation on all flights at home station, never building in maneuver room for the combat scenario, the potential to relearn these hard lessons will continue.

As aircraft advance with digital cockpit displays, bussed systems, integrated computer technology and government owned threat emulation software the technology exists to place aircrews in a simulated threat environment. These embedded devices would emulate threat systems and ASE responses through multi-function displays (MFDs) without having actual ASE systems installed. This threat environment would not require expensive emitters or personnel.

This capability will provide emulated threat in the real world, creating the most realistic flight training scenarios during every training flight.

This will provide commanders the ability to train against active threats programmed into the aircraft by the AMS officers.



An Aviation Combined Arms Tactical Trainer (AVCATT) screen shot of a missile engaging the CH-47D and the aircraft deploying countermeasures in the simulation.

Aircrew interaction with ASE during these events will emulate the real-world systems. Integration of this capability into the aerial gunnery program will provide realistic ASE declaration associated with the target assignments.

This survivability-lethality integration will enable crews to train with all systems providing accurate indications associated with target engagement scenarios.

Prior to the bussed aircraft solutions, this integrated training capability with currently available government owned material and software solutions was not possible on Army platforms.

### Achievable Goals

Albert Einstein stated: "We cannot solve our problems with the same thinking we used when we created them." Army Aviation's approach to resolving survivability requirements on tomorrow's battlefields falls within this description.

Shifting from the Aviation Tactical Operations Officer to the Aviation Mission Survivability program managed by the AMS Officer is the beginning of a complete solution.

In the 1992 after action review for Operations Desert Shield and Desert Storm, Army Aviation identified units that did not begin training for the threat in earnest until after they were

deployed. A little over two decades after Operation Desert Shield/Desert Storm, MAJ Jamie LaValley provided an article to the July-September 2013 Aviation Digest titled "A Hard Lesson Learned" where he discusses the requirement for additional threat based tactical flight training throughout the aviator's career. He later discusses weapons and tactics training, certification and instructor requirements.

A comprehensive tactics and threat training program established within each aviation unit will provide the environment necessary to inculcate aircrews with the instinctive skills to survive combat environments.

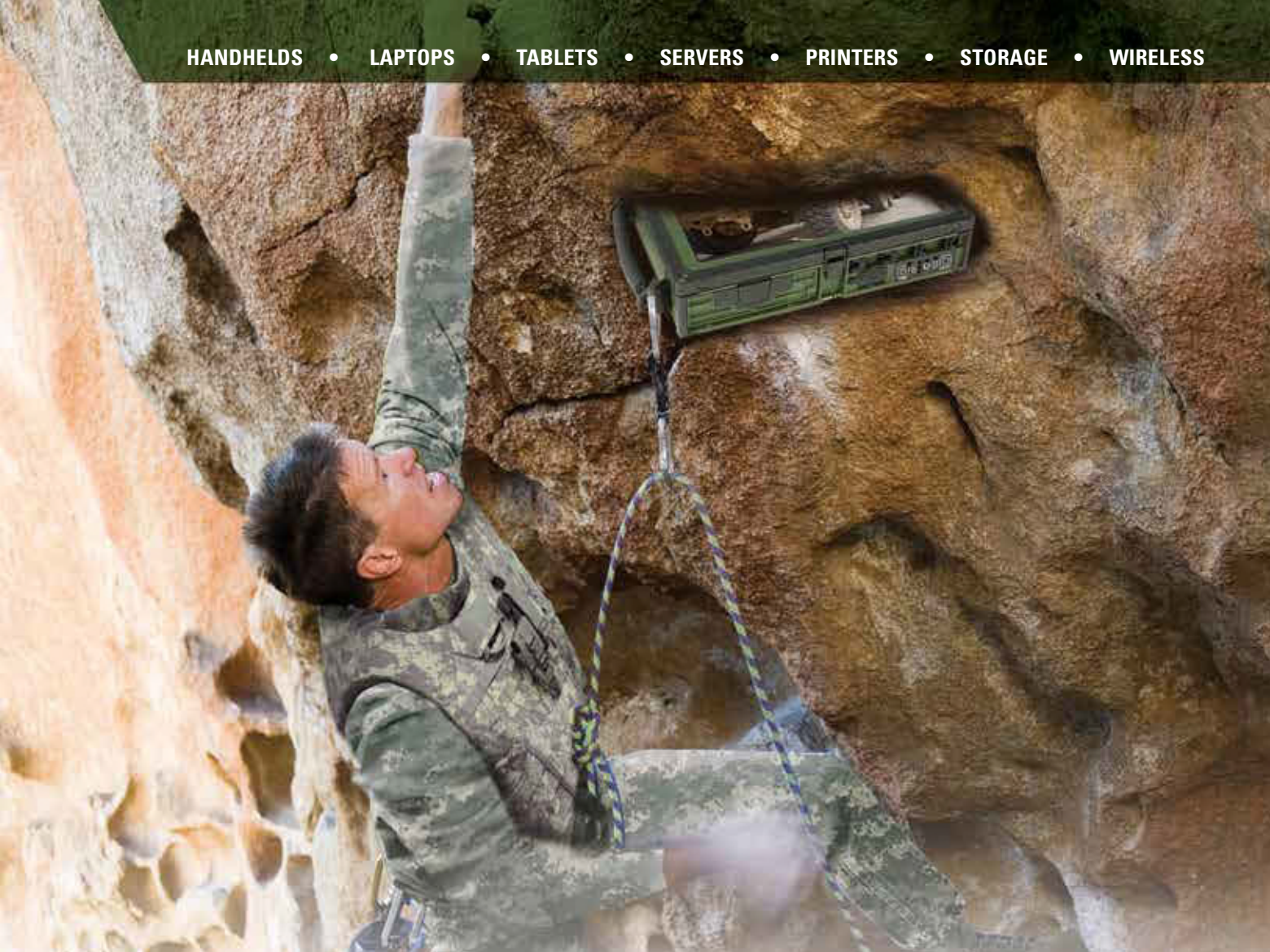
Establishing senior survivability officers as tactics evaluators through a training and certification process is essential to a long term solution.

Clear measurement of crew and unit capabilities to engage in aviation operations in simulated combat environments will provide commanders a better gauge of their unit's combat effectiveness.

The preservation of aviation combat power is the focus of the aviation mission survivability program.



CW5 Michael S. Kelley is the Branch Aviation Mission Survivability Officer, assigned to the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.



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# Enhancing Combat Survivability

## Army Aviation Tactics Development

By CW5 Bobby C. Sebren



Security elements gathering items from a downed aircraft.

Since 2003, Army Aviation has developed a formal process for assessing combat damage and loss events. Initially the effort was a threat focused process by the Aircraft Shoot-Down Assessment Team (ASDAT).

The team assessed numerous aircraft damage and loss events, providing specific information on those events back to the aviation force. That shot-hit data is vitally important to tactical operators, and is what the team built its reputation on; but it is only one part of the story.

The information is used by the intelligence, acquisition, and test communities throughout the DoD. Within our aviation forces, it provides essential data on how enemy and friendly forces function, leading to the development of tactics, counter-tactics and doctrine. The dissemination of aviation combat forensic data across the boundaries of these disparate but collaborative communities is vital to improving the survivability of our aviation soldiers and platforms.

Collecting this data is important; but using this information to develop or modify tactics techniques and procedures (TTPs), and communicate this relevant and timely information is the team's core mission.

### ASDAT's Evolution

Beginning in 2003, the team's primary focus was threat identification.

Our most important customer was then, and remains, tactical units. The team was on the cutting edge of combat data collection but the mission focused on events that had already occurred. It was comparable to driving down the interstate looking in the rear-view mirror.

The information commanders and aircrew really needed was what could happen in the future. The relevance and requirements of ASDAT developed information then became two-fold: develop information a deployed unit could use the very next day, while at the same time providing tailored, pertinent information to units before they deployed.

While ASDAT continued to respond to the daily needs and requests of our deployed aviators, the challenge became taking the information collected in combat and getting it to individuals and units in training. This takes place in the professional military education (PME) courses at Fort Rucker, at aviation unit home stations, and at the combat training centers and Reserve Component training sites. This provides commanders and aviators the time to incorporate that information into tactical planning and development.

By 2007 the ASDAT transitioned from an ad hoc team to an organization with an HQDA approved personnel slate of six senior warrant officers (Aviation Combat Forensics Officers,

ACFO) and two DA civilians (DACs). This solidified the ASDAT as a permanent resource within the Aviation Branch.

During a combat damage or loss assessment, the team not only employs the tools of combat forensics in the individual incident but also looks for susceptibility and vulnerability trends.

To do this they must have a complete understanding of the threat systems used by an evolving enemy, the enemy itself, and the aircraft and aircraft survivability systems. As tactical operations officers (TACOPS) with at least battalion level combat experience, ACFOs have a substantial basis of Army Aviation knowledge. Additionally, they receive advanced survivability, assessment, and intelligence training prior to assignment to the team.

This training provides team members a solid foundation in these fields, enabling them to work closely with relevant intelligence organizations and the test and acquisition community. Collaboration with the intelligence centers quickly becomes second nature to team members and provides valuable information that ACFOs are then able to pass on to units both overseas and in CONUS.

Having a number of members from acquisition and testing organizations on the original ASDAT deployed in 2003 taught us the value of close cooperation with survivability system

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ASDAT COURTESY PHOTO

The layout of an aircraft under assessment.

al mission. The Aircraft Shoot-Down Assessment Team is now the Aviation Survivability Development And Tactics Team. This re-branding keeps the signature ASDAT acronym but better describes the day to day efforts of the officers and civilians assigned to the team.

This will not end the ASDAT's efforts to improve combat data collection. The combat data collection processes refined over a decade of combat operations by ASDAT and the other components of the Joint Combat Assessment Team (JCAT) have led to numerous material and non-material improvements that directly improve aircraft survivability.

The Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L) has directed a Department of Defense (DoD) wide look at aviation combat damage data collection. This initiative drove an Air Combat Damage Reporting (ACDR) demonstration effort that examined methods to streamline reporting and data collection.

The goal is development of DoD wide guidance and standards for combat data collection. Army Aviation platforms are over six times more survivable than aircraft flown during the Southeast Asia Conflict because combat data collected during that conflict was applied to the design of our current platforms. The ASDAT and the JCAT personnel currently imbedded in our OEF based formations will continue to ensure this vital data is available to combat developers.

ASDAT's unique HQDA-directed mission puts the Team at the juncture of the operational, training, intelligence and acquisition communities.

The ability to operate across this organizational spectrum and identify key data points that assist these communities in providing timely solutions for the warfighter enhances the overall survivability of our aviation force.

Validation of the team's mission, expertise and products lies in the continued mission success of Army Aviation units and progressive improvement of the tactical and material solutions which increase crew and platform survivability.



*CW5 Bobby C. Sebren is the chief of the Aviation Survivability Development and Tactics Team, headquartered at the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.*

developers. Working in concert with the TRADOC Program Office – Aviation Brigades (TPO-AB), the team has had the opportunity to provide recommendations for numerous material solutions, from infrared strobes that mitigate the risk of night multi-ship operations over urban terrain, to modifications of aircraft survivability system hardware and software.

### Training

ASDAT's team-developed material became part of every PME program from the Pre-Command Course to the Aviation Warrant Officer Advanced Course. These efforts, along with tailored programs for technical training courses throughout the Branch's officer education program, ensure that information from combat assessments and tactics development is imbedded in and relevant to these programs.

In order to optimize Army Aviation knowledge management the next step was to address unit training during pre-deployment. A robust schedule of unit assistance visits and participation pre-deployment training makes certain ASDAT information reaches all deploying units.

This multi-faceted approach guarantees that the most relevant and timely information is provided to individual professionals and units during all phases of their deployment cycle, as well as to the institutional training communities that support them.

As part of Doctrine Division of the Directorate of Training and Doctrine (DOTD), U.S. Army Aviation Center of Excellence (USAACE), the team works closely with the Branch Aviation Mission Survivability Officer and Lessons Learned Integration cell for the collection, analysis and dissemination of TTPs, aircraft survivability equip-

ment (ASE) training strategies, and lessons learned to our aviation force.

The ASDAT's full-spectrum exposure to and communication with aviation units and intelligence organizations provides Doctrine Division with timely combat data, threat and survivability analysis, and a method to deliver vetted products to a wide number of organizations and programs.

This is one of the enablers for the DOTD to guarantee that the best practices, training products, and survivability information reaches our aviation force as soon as possible.

### The Way Ahead

While the team is best known for our combat forensics mission, that is just one part of the mission set. The development of effective tactics and counter-tactics, and ensuring those are part of the Branch's doctrine is just as important as the team's combat assessment tasks. As the team matured, it became clear that collecting combat damage data was an enabler, translating that data into products for the operational force was the center of gravity.

A natural extension of those efforts was giving the team primary responsibility for the development of Army Aviation's first classified tactics manual, ATP 3-04.17. The "dot-seventeen" is a collaborative effort of the offices within Doctrine Division and other organizations across the Aviation Enterprise. The goal, synchronized with the Army's Doctrine 2015 efforts, is to provide the Branch with a classified tactics manual that addresses threat systems, survivability equipment capabilities, and tactics/counter-tactics, from an Army Aviation perspective.

The team's evolution drove another action which was to change the team's designation to better reflect its actu-

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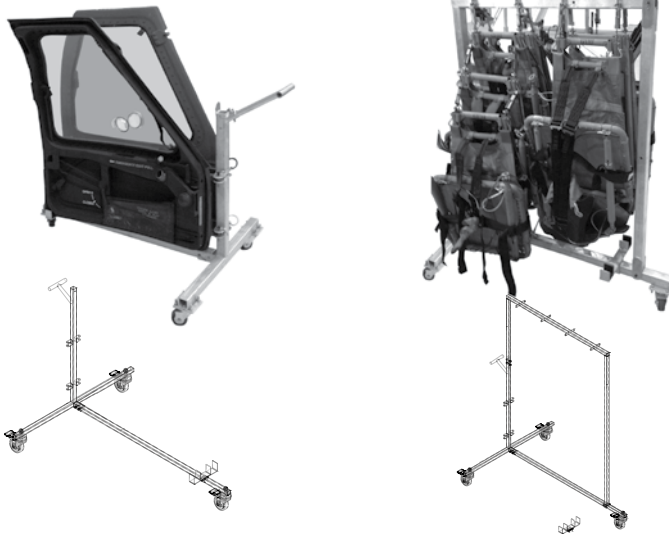
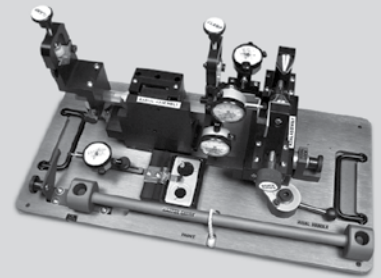


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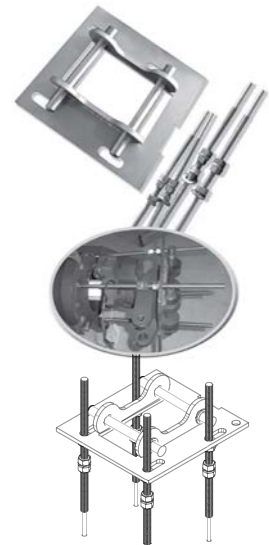
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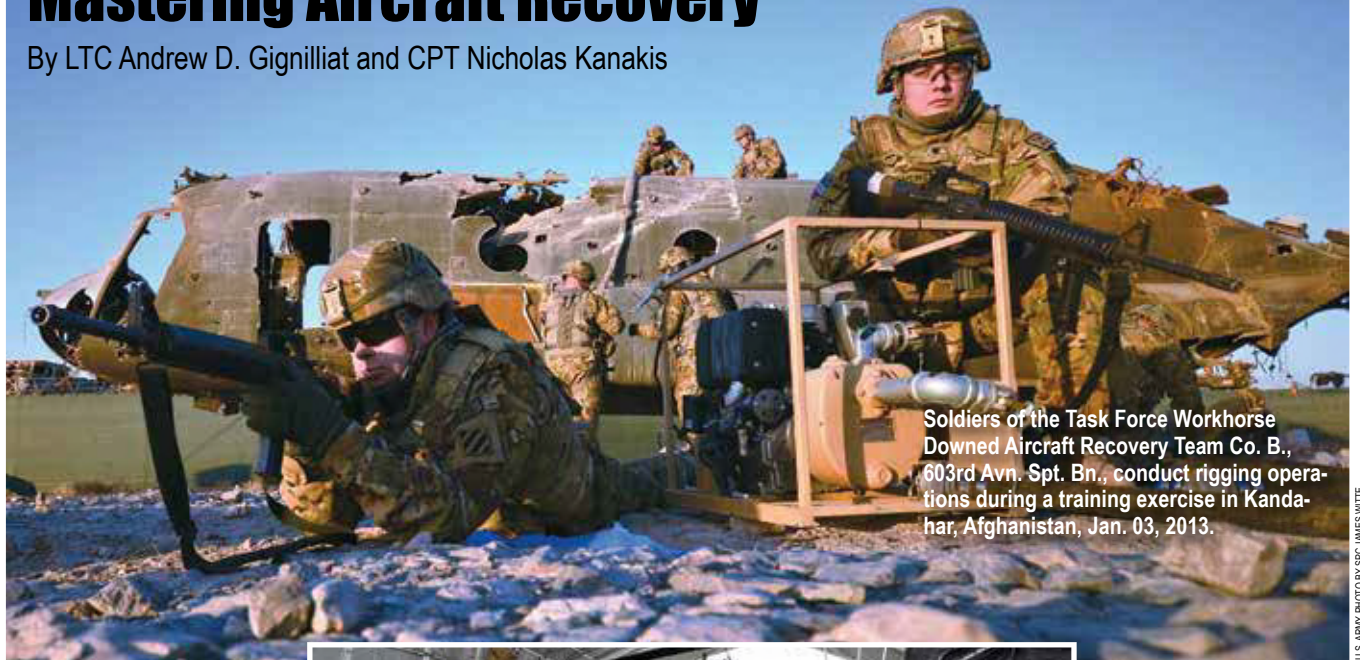
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# Task Force Workhorse – Mastering Aircraft Recovery

By LTC Andrew D. Gignilliat and CPT Nicholas Kanakis



Soldiers of the Task Force Workhorse Downed Aircraft Recovery Team Co. B., 603rd Avn. Spt. Bn., conduct rigging operations during a training exercise in Kandahar, Afghanistan, Jan. 03, 2013.

U.S. ARMY PHOTO BY SPC JAMES WITTE

**O**n January 2, 2013, the 603rd Aviation Support Battalion “Workhorse” assumed the Downed Aircraft Recovery Team (DART) mission across all of Regional Command (RC) South in Afghanistan.

Prior to deployment, the battalion set out to establish 3rd Combat Aviation Brigade’s (CAB) premier recovery team and did so by deliberately implementing a plan which staffed, equipped, trained, and eventually facilitated real-world aircraft recoveries.

Since that time, the 603rd DART successfully executed six aircraft recoveries to include the simultaneous sling-load recovery of a Black Hawk and Kiowa Warrior separated by over 115 miles of rugged Afghan terrain.

In addition to providing support to 3rd CAB, the Task Force (TF) Workhorse team demonstrated its joint capabilities by pairing with contractor, USAF and 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) teams to support recovery of unmanned aircraft systems (UAS), fixed wing, Mi-8, OH-



Co. B, 603rd ASB., 3rd CAB Soldiers following the successful recovery of a UH-60L within Uruzgan Providence, Afghanistan on Jun 12, 2013.

U.S. ARMY PHOTO BY SPC JAMES WITTE

58, and UH-60L aircraft.

TF Workhorse DART consists of 44 Soldiers capable of executing aircraft recoveries under day, night, night-vision goggle (NVG) and inclement weather conditions.

## Manning

The Workhorse DART training program began in earnest in August of 2011 through various individual and company level training exercises. Skill sets were initially tested during a field training exercise (FTX) in February 2012, where battalion leadership identified numerous short-falls in team training, staff reaction, and resourcing.

The first step was the reevaluation

of team leadership. In March of 2012, CW5 Scott Reagan, an Apache Maintenance Test Pilot and the CAB’s Maintenance Examiner, assumed his duties as DART 06.

CW5 Reagan, along with his NCOIC, SSG Marc Scialdo, understood that although many variables contribute to the success or failure of any team, the greatest remains the

talent and coach-ability of its members. With that in mind, he reassessed the team’s composition based upon required skill-set, individual MOS / technical proficiency, Soldier trainability and physical fitness.

Rather than select only a few individuals, CW5 Reagan developed a team which incorporated over 40 Soldiers with varied expertise including aircraft mechanics, component repair experts, avionics repairmen, aircraft defuelers, medics and communication specialists. With such a large compliment of Soldiers, the Workhorse DART built teams for each of the Army’s airframes capable of ensuring 24/7 redundancy. This included the se-



lection of an alternate OIC and NCOIC, four individual team leaders and the continuous cross training among all team members.

## Training

After reorganization, CW5 Reagan and SSG Scialdo developed a methodical training plan which focused on individual skill-sets, team operations, and battle drill execution.

Soldier training included Combat Life Saver (CLS); NVG driver's training; Battle Damage Aircraft Repair (BDAR); Unit Maintenance Aerial Recovery Kit (UMARK); extensive basic rifle marksmanship and qualification on M-4, M-16, M-249, and M-240B weapons systems; recovery equipment familiarity (Spider crane, chop-saw, Jaws of Life, etc.); small unit leader tactics; land navigation; and communication training on multiple radio systems.

Training continued at the collective level during the DART Situational Training Exercises (STX) at the Joint Readiness Training Center in May 2012 and a company DART training exercise in June 2012. Soldiers demonstrated mastery of individual tasks and trained as small teams to establish duties during recovery operations.

Simultaneously, the Workhorse staff collaborated with CW5 Reagan to develop a streamlined battle drill capable of providing necessary information to the team in the event of a DART scenario.

The DART tested the product of these brain-storming sessions during the CAB FTX, "Falcon Focus," with elements from 1-3rd Attack Helicopter Battalion and 2-3rd General Support Aviation Battalion.

During "Falcon Focus," two of the battalion's four teams trained to the highest levels of proficiency completing full rigs on both UH-60 Black Hawk and AH-64 Apache helicopters in less than 15 minutes through repetitive team battle drills.

Over time, small refinements to products, briefs, information flow and staff action sequencing helped polish a concise DART battle drill adopted into the 3rd CAB standard operating procedures (SOP).

Ultimately, the TF Workhorse team assumed ownership of the DART mission throughout all of RC-S based upon demonstrated proficiency at team, staff, and command levels.

## Execution

The countless variables, complexity and emotional urgency associated with a downed aircraft recovery require a deliberate and sequential approach to successfully execute such a complex mission.

This was most apparent during the team's first recovery on March 11, 2013 when a UH-60L, "Black Hat 14," crashed just outside of Kandahar Airfield with SSG Scialdo, the DART NCOIC, aboard as a crewmember.

As key battle staff and team leadership moved to 3rd Squadron, 17th Cavalry Regiment's Task Force Tactical Operation Center (TOC) to receive a mission update, the remaining team members finalized pre-combat checks and inspections of their gear.

SSG Ronald Latour, the team's alternate NCOIC and technical inspector, deployed to the DART objective with the ground security force as one of the first Soldiers on the scene.

While there, he provided critical aircraft damage assessments to the TOC and selflessly assisted with the recovery of our CAB's Heroes and their sensitive items.

Despite the emotional loss of their NCOIC, SSG Scialdo's DART accomplished their duties in a manner that would exemplify his professionalism and honor his memory.

Although the team conducted five additional aircraft recoveries since this event, the loss of the "Black Hat 14" crew and SSG Scialdo will remain TF Workhorse's most somber and humbling experience.

The truest test of any organization is its ability to perform at peak output and successfully accomplish the mission regardless of the circumstances.

On July 11, 2013, the DART did just that by concurrently recovering both a downed OH-58D Kiowa Warrior and UH-60L Black Hawk within a 17-hour timeframe.

Just two hours after launching the first team to the mountainous terrain of Uruzgan, Afghanistan to recover the UH-60L, the Workhorse TOC received a call for assistance with the recovery of an OH-58D in the Horn of Panjwai approximately 115 miles southwest inside a hostile, urban desert environment.

Thanks to extensive cross training of personnel, prepositioning of equipment and in-depth battle drills, a second DART capability organized under



CW5 Scott Reagan (right), the Workhorse DART OIC, and SSG Marc Scialdo, NCOIC, discuss communications prior to a training exercise in Kandahar, Afghanistan, Feb 2013.

the leadership of CPT David Daniels and was subsequently supported by aircraft from the 160th SOAR(A), ground force security from 3-17th Cav., and elements of a special operations task force.

Despite the persistence of "red illumination" conditions, CPT Daniels' team successfully removed all major components and rigged the heavily damaged OH-58D for a safe and expedient sling load recovery, denying the enemy any potential propaganda opportunities.

Less than 2 hours later, the first team led by CW2 Christopher Stevens successfully recovered the UH-60L from an isolated 9,045 foot mountain ridgeline with the help of the "Vertical T" Mi-26 heavy lift helicopter.

## Conclusion

Despite hard won lessons and bitter losses, the TF Workhorse DART is exceptionally proud of the accomplishments born from the mentorship of strong leaders, deliberate training and technical excellence.

While they are proud of their accomplishments, their legacy will be one of teamwork, camaraderie and professional dedication to their fellow Soldiers; a legacy repeated throughout the course of our Nation's history.

❖❖  
*LTC Andrew D. Gignilliat is the Commander of the 603rd Aviation Support Battalion and CPT Nicholas Kanakis is the battalion Assistant Operations Officer. Both are assigned to Hunter Army Airfield, GA.*



# Wings of Destiny Ball

By CPT Christina M. Wright

**T**he 101st Combat Aviation Brigade completed their latest deployment in support of Operation Enduring Freedom in May 2013. The Wings of Destiny celebrated their return home with family and friends during the brigade ball on July 18, 2013 at the Gaylord Opryland Hotel and Convention Center in Nashville, TN.



U.S. ARMY PHOTO BY SGT DUNCAN BRENNAN, 101ST CAB PUBLIC AFFAIRS

CSM Galu P. Satele, left, and LTC Joel K. Aoki, right, commander, 6th Battalion, 101st Combat Aviation Brigade, toast a successful deployment at the Wings of Destiny Ball.



Unit ministry teams from the 101st Combat Aviation Brigade pose for a picture during the Wings of Destiny Ball.



COL Paul Bontrager, left, commander, and CSM Stuart C. O'Black, right, prepare to add champagne to the grog in recognition of a momentous deployment for the 101st CAB during a ceremony at the Wings of Destiny Ball.



CPT Jill M. Rahon, commander, Company B, 6th Battalion, 101st Combat Aviation Brigade, poses with Master Tech Sgt. Cliff R. Reeder, U.S. Marine Corps, retired, a WW II veteran, at the 101st CAB, Wings of Destiny Ball.



MG Kevin W. Mangum, commander, U.S. Army Aviation Center of Excellence (USAACE), provides the keynote address at the 101st Combat Aviation Brigade, Wings of Destiny Ball.



Above: COL Paul Bontrager, left, commander, 101st CAB, prepares to present MG Mangum with a memento at the Wings of Destiny Ball.



MG Mangum, accepts a personalized rocking chair from COL Bontrager for outstanding support of the 101st CAB during the Wings of Destiny Ball.

Right: COL Paul Bontrager, left, commander, 101st Cbt. Avn. Bde., inducts David Bowering, documentary film maker, into the Honorable Order of Saint Michael at the Wings of Destiny Ball. Bowering was honored for his efforts to showcase the bravery of the Soldiers of Company C, 6th Bn., 101st CAB, Shadow DUSTOFF, during their most recent deployment to Afghanistan.

*CPT Christina M. Wright is the public affairs officer for the 101st Combat Aviation Brigade, 101st Airborne Division (Air Assault) at Fort Campbell, KY.*



# THE DISTINGUISHED FLYING CROSS SOCIETY



## Preserving the Heritage

By COL J. Bruce Huffman, Retired

**T**he Distinguished Flying Cross (DFC) is our nation's highest award for aerial achievement.

As a valor decoration, it ranks fourth in order of precedence, and is awarded to recipients for heroism or extraordinary achievement while participating in aerial flight.

The DFC has been awarded to pilots and air crew in all five of our services (United States Army, United States Navy, United States Marine Corps, United States Air Force and the United States Coast Guard). Recipients represent a diversity of backgrounds, ethnicity, rank and gender whose aerial achievements were chronicled from the chaos of combat, to epic rescues, out to the very edges of space.

The DFC was established by an Act of Congress on July 2, 1926 to recognize the heroism of World War I pilots.

The first DFC citations were presented to the Pan American Good Will Flight crews on 2 May, 1927 by President Calvin Coolidge, for their five-ship, 22,000 mile flight.

President Coolidge presented the first DFC medal, on 11 June, 1927, to then Captain Charles A. Lindbergh of the Army Air Corps Reserve, for his solo flight of 33 ½ hours and 3,600 statute miles; beginning from Long Island, NY and landing in Paris, France.

Lindbergh, the 'Lone Eagle,' is a legacy member of The Distinguished Flying Cross Society.

The Distinguished Flying Cross Society itself (DFCS) was founded in 1994, as a 501(c)(19) nonprofit organization, headquartered in San Diego, CA, and is made up of those men and women who were awarded the Distinguished Flying Cross and their relatives. The Society currently has more than 6,000 members and was found-

ed on the fraternity and fellowship among military fliers.

It seeks to preserve the rich heritage and historical narratives of those who are recipients of the DFC and to educate the general public, especially the youth of America, on the values of courage, patriotism and character; those very characteristics upon which America was founded. By doing so, it elevates the awareness of the award itself and demonstrates to the public that a very small cross section of ordinary Americans can and have accomplished extraordinary things under extremely difficult conditions while in flight.

The DFCS recently published "On Heroic Wings: Stories of the Distinguished Flying Cross," with the Foreword written by President George H. W. Bush and the Introduction written by Captain Jim Lovell; both recipients and members.

The book is based on oral history accounts, DFC citations and other associated primary source documentation. Visual images gathered from personal collections and archives illuminate the comprehensive content of this volume. While the acquisition of the factual data was essential, capturing the personal feelings and perspectives of American aviation heroes added to the richness of the publication.

*Editor's Note: A review of this book is located on page 57 of this issue of ARMY AVIATION.*

The DFCS is also moving forward to produce a syndicated film documentary on the Distinguished Flying Cross that will honor the legacy of the award as well that of its recipients.

The Character Development Program (CDP), produced by the Medal of Honor Foundation as an educational outreach, has recently been recog-

nized by the DFCS as an extremely worthy cause and efforts are underway to lend the support of our membership toward that effort. An active scholarship program also exists for the descendents of DFCS members.

The Distinguished Flying Cross Society recognizes the strong historical connection between its origins and those of Army Aviation.

The DFCS looks toward the ranks of the Army Aviation Association of America and those members who are recipients of the Distinguished Flying Cross to join with them in the preservation of their personal histories and to assist us in furthering our educational goals.

We are making a special appeal to the current generation of heroes who have served since the first Gulf War as well as all others who may have been awarded the DFC.

As Kenny Chesney said in his 2007 hit 'Don't Blink,' "Trust me, friend, a hundred years goes faster than you think; so don't blink," act today!

If you are a DFC recipient and would like to see the historical narrative of your award preserved to serve as an inspiration for future generations, go to the DFCS website at [www.dfcsociety.org](http://www.dfcsociety.org) for information and requirements for joining our ranks.

Families of a deceased DFC recipient are also encouraged to enroll their loved one and become an Associate member.

For additional information, call our toll-free number at 1-866-332-6332.



*COL (Ret.) J. Bruce Huffman is a retired Master Army Aviator and a director of the Distinguished Flying Cross Society.*



# ALSERP

By Dr. (LTC) Joseph Puskar

### **Q: What is the U.S. Army's aviation life-saving equipment recovery program (ALSERP) all about?**

**FS** – The following is taken from the U.S. Army Aeromedical Research Lab (USAARL) official mission statement for the ALSERP program:

“The primary objectives of the aviation life support equipment retrieval program (ALSERP) are: (a) to determine why aviation mishap occupant injuries were or were not incurred and (b) to develop concepts and criteria for design improvements through the analysis of injuries and their correlation to retrieved aviation life support equipment (ALSE).”

Two ultimate goals of the ALSERP are to maintain and increase the level of protection during aircraft mishaps by collating and presenting clear injury and equipment failure data and trends to substantiate design improvements, and the exploration of design alternative concepts for the mitigation and reduction of crash induced injury.”

As originally conceptualized, the composition of an ALSERP inspection team was intended to be a critical element in validating the outcome of case deliberations (USAARL policy 95-55, Appendix B), and comprised of personnel selected from the disciplines of ALSE, medicine, engineering, aviation, and safety.

“Although fundamentally sound in concept, as with many other programs, limitations in availability of qualified personnel, funding constraints, and other more urgent priorities evolving from over a decade of continuous combat operations have prevented the ALSERP program from developing into what was hoped for by the researchers who pioneered the original concept,” said COL Mark Adams, a British Army exchange pilot-physician who leads the ALSERP team at USAARL.

“In order to achieve the program’s

stated goals, and to continue to make incremental improvements in our ALSE kit, we also need to encourage a much higher participation rate in the program than we are seeing at the present time.” said COL Adams. The lab does not desire ALSE retrieval if the mishap was determined to be non-survivable and there were no survivors.

Gear that they are interested in evaluating include any ALSE that contributed to or caused injury, any ALSE that restricted or hindered egress, all ALSE associated with post-crash fires, and restraint system component failures to include the belt, harness, buckle, or inertial reel. Also requested are all available restraint system components when upper torso and flail injuries are incurred by the crew, and all unserviceable items of personal restraint. Crashworthy seats should be shipped separately from other ALSE after coordination with ALSERP/USAARL personnel due to long delays experienced in their packing and shipping.

Seats of particular interest include those that stroked, or that failed to stroke due to an obstruction, or any seat that in the experience of the investigator should have stroked, but failed to do so.

Seats that show any evidence of distortion, damage or corrosion, or when the occupant suffered a spinal injury or other significant injury such as a leg bone or hip fracture should be sent in. ALSE that performed as designed such as a helmet visor that impacted a cyclic control and prevented an injury is also of interest to the lab.

Successes of the program have resulted from a systematic, logical correlation of injuries incurred in mishaps with ALSE successes and failures to prevent them. These include improvements in crashworthy seating, aircraft/airframe crashworthiness, improved helmets, human anthropometric design improvements for optimized performance and survivability, and iner-

tial reel and restraint system upgrades.

Frangibility of aircraft structure and associated mechanical insults to the crew are included in the systems-based approach to cockpit design considering accurate health hazard identification from previous mishaps.

Helmet design improvements of the shell material and design, liner, visor, chinstrap and nape strap, energy-attenuating ear cups, and the development of a helmet retention system for some models have dramatically reduced the impact forces transmitted to the head and brain in most crash sequences compared to older flight helmets. A new monorail gravity drop tower is being built at Fort Rucker to continue research in helmet design improvements.

Regulations that cover the ALSERP investigations, and that require equipment evaluation after a mishap involving an injury are: DA Pamphlet 385-40, Army Accident Investigative reporting, paragraph 2-4 h., AR 40-21, AR 95-1, AR 340-17, and see also AR 385-10 for some useful guidelines.

COL Adams and his team at USAARL ask that mishap investigation teams and unit ALSE shops send any ALSE gear that appears to have failed or been damaged, and particularly that resulted in an aircrew injury to USAARL (ATTN:ALSERP), 6901 Farrel Road, Fort Rucker, AL, 36362-0577. DSN 558-6815/6870 or COM 334-255-6815/6870.

According to the U.S. Army Combat Readiness Center’s surgeon, COL Mark McPherson, “We can, and we should, but we’re not doing this (consistent ALSERP studies). If we want to save lives and prevent injuries we must return to the earlier, 1990s-era level of interest and emphasis on research in this area that is critical to aircrew survival.”

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*



# A Look at Our Scholarship Applicants and Previous Winners

By Catherine C. Roache

The AAAA Scholarship Foundation congratulates our 2013 AAAA Recipients! The hard work and dedication of the students who applied for scholarships is evident in their applications, GPA's, and the volunteer, extracurricular efforts of these outstanding aviation community members.

Applications show a diverse and exciting group of students studying veterinary science, music, literature, engineering, finance and medical, to name a few. We have students who work full time while in school; student athletes; and those who volunteer for Habitat for Humanity, missionary service and tutoring. The list goes on and on.

We are constantly amazed as we review the applications in the chosen fields of study and the enormous workload these outstanding students are committed to.

There are five qualifying categories for eligibility to apply for an AAAA-SFI Scholarship: member, spouse, child, sibling and grandchild. As we celebrate their success and the 50th Anniversary of the Scholarship Foundation, we laud our scholarship recipients over the past 50 years and would like to share their inspiring stories.

Jackie Gordon, a 2011 scholarship recipient, and AAAA Old Tucson Chapter member has graciously shared her scholarship success story.

Jackie is a typical example of an AAAA member scholarship recipient – she aimed high, set her goals and realized her dreams.

Equally impressive, is her dedication to our AAAA professional organization. She is an active member of her chapter, serving as an officer, complementing her professional life as a business owner in the field of aviation. Here's Jackie's story in her own words.

*"I received an AAAA Scholarship sponsored by Robertson Fuel Systems two years ago. I was a stay-at-home mother while my girls were growing up. After my youngest daughter started middle school, I got a job as an administrative assistant at an aviation engineering firm. This is when I joined AAAA.*

*After my youngest daughter graduated high school, she joined the Army; she is an Apache crew chief currently stationed in Korea. I decided to go back to school with the goal of graduating with a BS in Business Management before my 50th birthday. I achieved my goal when I received my degree six months ahead of my schedule! I have recently started my own business providing FAA certification management for general aviation.*

*I am the Vice President of Membership for the Old Tucson Chapter and the Vice President of Blue Star Mothers of America AZ. Both of my daughters are engaged to Army Aviators and I am very proud to be associated with such a wonderful group of professionals."*

It is extremely gratifying to read the many thank you letters from the Foundation's recipients. As a volunteer I feel proud that I have assisted in some small way. Some excerpts of this year's letters include: "I promise you to remain a contributing member of AAAA..." and "It fills me with joy to write you with my thanks. I will take this reward respectfully and strive myself to better my grades and work ethic in order to maintain my relationship with the AAAA Foundation."

And from a parent: "We cannot thank you enough for this generous gift. It was proof to our son that hard work does pay off; he wouldn't really have been able to attend without this."

The AAAA Scholarship Foundation program is one of our association's most valuable assets for our mem-



Scholarship recipient, Jackie Gordon (left) and her husband, Tom, welcome their daughter, SPC Stephanie Gordon, home from her deployment to Iraq on Oct. 11, 2009 at Hunter Army Airfield, GA. She is presently assigned to Co. B, 4th Bn., 2nd Avn. Regt., Camp Humphreys, Republic of Korea.

bership. Although we cannot award a scholarship to each and every applicant, the Foundation strives throughout the year to increase the award levels of current scholarships as well as increase the number of scholarships awarded.

There are four types of scholarship categories managed by the AAAASFI:

- Chapter
- Corporate
- Heritage
- Individual

If you would like to discuss how your chapter, company or you as an individual can start up an AAAA Scholarship, please contact your chapter VP Scholarships or one of the Board of Governors of the Scholarship Foundation. Our dedicated AAAASFI Team is here for you!

*Catherine C. "Kit" Roache is the chairwoman of AAAASFI Board of Governors Publicity Committee and secretary of the Mid-Atlantic Chapter.*

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For more information on donations and scholarship applications call 203.268.2450 or visit [www.quad-a.org](http://www.quad-a.org)



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# The Southern California Chapter

By LTC (Ret.) Jan S. Drabczuk

*I appreciate the support from LTC (Ret.) John Hendrickson, the Southern California Chapter President and LTC (Ret.) Tom Lasser chapter Senior Vice President for providing and sharing this information to our membership.*

Several years ago, California had up to seven AAAA chapters. Due to base closures, realignments, and a lot of the aerospace industry moving to other states, the Army Aviation Association of America is now down to two chapters in the Golden State. They are the High Desert Chapter located at the National Training Center, Fort Irwin and the Southern California Chapter.

### History and Membership

The Southern California Chapter has been in existence since the early '60s. The Chapter, primarily in the Los Angeles and Orange County areas, extends from Vandenberg Air Force Base in the North down to San Diego, and out to the Inland Empire of Riverside and Palm Springs.

A vast, spread out geographical area that presents a membership challenge and more importantly, difficulty in gathering members for meetings and events. The Chapter was originally formed around the vast aerospace industry and defense companies prominent in the southern part of California. This core audience still constitutes the majority of the membership and is a vital part of the organization.

Current Southern California chapter members include those in the aerospace and defense industry, retired military, Guard and Reserve aviation personnel, and those who the chapter calls 'Friends of Army Aviation.'

### Supported Units

The center of gravity of Army Aviation in Southern California is the avi-



Los Alamitos Army Airfield Tower, California

ation units located at Los Alamitos Army Airfield (KSLI). "Los Al" is a former Naval Air Station that the California National Guard has been operating since the early parts of the '70s.

Current flying units stationed at Los Al include the 1st Battalion, 140th Aviation Regiment and Company B (AVIM) of the 640th Avn. Spt. Bn. Both of these units are under the Guard's 40th Combat Aviation Brigade.

6th Bn., 52nd Avn. Regt., The Flying Dragons from the Army Reserves, the most recent recipient of the AAAA Fixed Wing Unit of the Year award, call Los Al home. As does Company A, 7th Bn., 158th Avn. Regt., a USAR Black Hawk unit. There currently are no chapters in the northern part of California although California guard aviation units are stationed in the cities of Fresno, Stockton and Sacramento.

The Chapter helps these guard units out with awards and recognitions such as the Order of Saint Michael and Order of Our Lady of Loreto awards.

### Chapter Reorganization and Planned Activities

The Chapter had rejuvenation in the early 1990's when the late COL (Ret.)

Jake Benjamin gathered the troops at Los Alamitos and made things happen. Southern California had a larger contingent of guard and reserve aviation units during that time and industry participation was a very significant contributor, providing man power, ideas and financial support. Jake passed away early this year and the Chapter subsequently began some reorganization and establishing new priorities for AAAA in Southern California.

With new leadership, the Chapter is starting a membership drive, led by VP Membership – Mike Letson, and Senior VP LTC (Ret.) Tom Lasser, focusing on the Los Al aviation units.

The new Chapter president, LTC (Ret.) John Hendrickson, is actively pursuing new directions. This includes recruiting new board members, fundraising activities, holding quarterly meetings, and seeking participation and support from the defense and aerospace companies in the area.

Working closely with the Southern California Vietnam Helicopter Pilots Association, VHPA, it is envisioned that a number of "joint" professional meetings will be held. Another meeting approach for this year will be the



October 27th (quarterly) general membership meeting to be held at the end of the “Wings Wheels & Rotors Expo” on Los Alamitos Army Airfield. Sponsored by the Joint Forces Training Base and the Los Alamitos Chamber of Commerce, “Wings Wheels & Rotors” is a fund raising event benefiting the Morale Welfare and Recreation fund for military at the Los Alamitos Joint Forces Training Base.

It features helicopters, airplanes (and rides), hot rods and motorcycles. Both the Southern California Chapter as well as the VHPA will have booths there, inviting perspective members to find out what these associations are all about.

Plans and coordination are being made for an active scholarship program, reconstitution of Soldier of the Quarter/Year and Aviator of the Year awards, and other initiatives such as a Chapter website and new email address.

### Summary

Each of our 70 AAAA chapters is unique. Some are well established with core active duty supported units; others are very diverse and spread out across a large geographical area.

Army Aviation is alive in Southern California – Southern California is on its way. More work to be done but good things are happening...Surf's Up!

Feel free to contact me if you need help for your chapter, executive board support, or to obtain clarification of National procedures at [jan.drabczuk@quad-a.org](mailto:jan.drabczuk@quad-a.org). I look forward to working with you and supporting AAAA.

❖❖

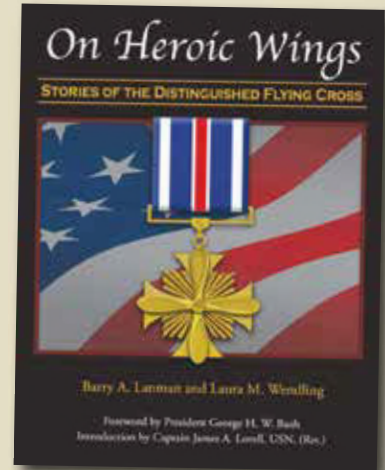
*LTC (Ret.) Jan S. Drabczuk*  
AAAA VP for Chapter Affairs

## BOOK REVIEW

### On Heroic Wings: Stories of the Distinguished Flying Cross

By *Barry A. Lanman, PhD.*  
and *Laura M. Wendling, PhD.*

Reviewed by *CW5 David F. Cooper,*  
*U.S. Army, Retired*



This is the definitive work on the origin, development and lineage of the Distinguished Flying Cross and the oral histories of the aviators who are its recipients.

The first chapter of this well researched and chronicled book allows the reader to delve into the history of the DFC. For example, the first DFC recipients only received a citation – the DFC medal had not yet been approved! The following chapters represent the conflicts in our nation's history. While not every DFC citation or recipient is included in the book, the authors do a masterful job including a sampling of representative stories from the separate conflicts. Additionally, recipient's stories from all five branches of service are included.

These are first person accounts of aerial combat and rescues under the most demanding of circumstances. The narratives cover the gamut from air-to-air combat to close air support to space flight. The reader will quickly find themselves caught up in the action of each story. The book records notables who were awarded the DFC to include a former president, astronauts, actors, and even a grandfather and his grandson. It even chronicles the events of a former Kamikaze pilot who went on to earn the DFC.

*On Heroic Wings: Stories of the Distinguished Flying Cross* is an excellent read with a beautifully decorated jacket that makes it an ideal coffee table book that you'll have actually read.

*CW5 (Ret.) David F. Cooper is a former Master Army Aviator who served as the first Command Chief Warrant Officer of the U.S. Army Special Operations Aviation Command; is an inductee and trustee of the Army Aviation Hall of Fame; and is presently serving as the Army Aviation Association of America National Vice President for Membership.*

## Photo Contest - Calling for Entries!



Winning entries will be published in the 2014-2015 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.



## The Membership Corner

By CW5 (Ret.) David F. Cooper

I was lucky enough to write a review of the book *On Heroic Wings: Stories of the Distinguished Flying Cross* by Barry A. Lanman, PhD. and Laura M. Wendling, PhD. The review is on page 57 in this issue of *ARMY AVIATION* – it is a wonderful book, suitable for any coffee table and the proceeds go to a great cause. While reviewing the book I thought about other heroic aviation stories I’ve heard over the years. Many started with the famous quote, “No kidding, there I was...”

However, the quiet professionals of the enlisted aviation Soldiers rarely discuss their awards. In fact, without asking you’d never know they were heroes (a reference they’d never use to describe themselves).

One such Soldier is Sergeant First Class Eugene M. Sides. As an instructor at Fort Rucker’s Aircrew Standards Instructor Course his students would never know he was awarded the Distinguished Flying Cross. In fact his chain of command didn’t know anything about it until his first sergeant got a call saying that the commanding general of Fort Rucker wanted to pin on the award himself.

SFC Sides, “there I was...” moment began the evening of January 9, 2011. He was the crew chief for an armed Black Hawk helicopter, flying for the 160th Special Operations Aviation Regiment (Airborne).

As the helicopter assault force approached the target the flight began taking effective rocket propelled grenade (RPG), small arms and heavy machine gun fire from both sides of the flight. As his aircraft maneuvered, SFC Sides returned fire with his M-4 while fully exposed through the open cabin door. He engaged multiple enemy combatants who had just fired two RPGs at the flight.

His calm demeanor and experience allowed him to relay critical information to the pilots as he continued to reduce the enemy force. SFC Sides provided suppressive fire as the flight maneuvered for six separate direct fire engagements. During the two hour battle he twice fixed malfunctioning mini-guns and re-seated high explosive rockets.

Interviewing SFC Sides for this piece I found him to be a focused, soft-spoken Soldier who is comfortable in his own skin. His work allows for both classroom and flight instruction. He enjoys his family, camping, NASCAR, and raising money for the Wounded Warrior Project and he is a new member of the Aviation Center chapter of AAAA.

His actions distinguished him as an exemplary Soldier, warrior and non-commissioned officer.



MG Kevin W. Mangum, USAACE and Fort Rucker commanding general, talks about Sgt. 1st Class Eugene M. Sides, 1st Bn., 212th Avn., just before pinning the Distinguished Flying Cross on the NCO March 21 at USAACE HQ.

PHOTO BY JIM HUGHES, COMMAND INFORMATION OFFICER



MG (Ret.)  
Patrick H. Brady

On July 14, 1964 the National Aviation Hall of Fame (NAHF) was chartered by the Congress of the United States. Its mission – recognize aviation achievement generated by American ingenuity and individual acts of great vision, persistence, skill and courage. It’s hard to believe that there were zero Army aviators in the National Aviation Hall of Fame – until this month.

On the evening of October 4th, 2013 MG (Ret.) Patrick H. Brady was inducted into the NAHF. A Medal of Honor recipient, he is (in this author’s opinion) the perfect candidate to be the first Army aviator selected for enshrinement.

He flew 2,000 combat missions during his two tours in Vietnam and saved more than 5,000 wounded Soldiers. However, on January 6, 1968 he evacuated fifty-one wounded South Vietnamese and U.S. Soldiers under the most trying of circumstances.

On the first mission that day he volunteered to fly through thick fog to get wounded Soldiers off the battlefield. To accomplish his mission he followed a jungle trail leading him through enemy held positions to the landing zone. His crew loaded the casualties and off they flew back through the fog.

His next mission was again through the fog. The enemy was a mere 50 meters from the casualties. Two aircraft had already been shot down attempting the MEDEVAC and several others had tried and failed.

Then-Major Brady made four separate flights into the landing zone to pick up all the casualties. The UH-1’s flight controls took several hits – it was time to change aircraft.

MAJ Brady’s day was not done.

An American unit was trapped in a minefield with casualties and he again answered the call, landing his helicopter in the minefield and his crew retrieved the casualties.

On their way back to the aircraft they detonated a mine and both were injured with the aircraft taking significant shrapnel damage. Finally, with crew and casualties on board, MAJ Brady flew to the medical aid station.

MG (Ret.) Brady’s flying skills and courage are legendary. He set the example for every aviation Soldier that followed him.



CW5 (Ret.) Dave Cooper  
AAAA VP for Membership

# Iron Eagle Brigade Activates



U.S. ARMY PHOTO BY SGT. JONATHAN C. THEBAULT, 4TH CAB PWO

The "Iron Eagles" of the 4th Combat Aviation Brigade, 4th Infantry Division are officially back in the sky again, two years after the CAB was deactivated at Fort Hood, TX. BG Michael Bills, left, deputy commanding general of the 4th Infantry Division and Fort Carson, CO watches as COL Robert T. Ault, middle, brigade commander, passes the brigade colors to CSM Antoine J. Duchatelier Jr., right, senior enlisted leader, during the 4th Combat Aviation Brigade, 4th Inf. Div., activation ceremony on Founders Field at Fort Carson, CO, July 2, 2013.

In addition to the CAB headquarters, 2nd Bn., 4th Avn. Regt. and the 404th Avn. Spt. Bn., minus, are currently active and already have been providing support to the local community firefighting and flood relief efforts, even before their formal activation. The remainder of the CAB's units (1st, 3rd, and 4th Bns., 4th Avn. Regt.), are scheduled for activation in April, 2014.

*Editor's Note: 4th CAB information was not available in time for inclusion in the 2013 Blue Book; we have included it here and in the digital edition which will be available to AAAA members only.*



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I certify that the statements made by me in this statement and dated October 1, 2013 are correct and complete.

William R. Harris Jr., Publisher



# Planning for the Holidays

By Judy Konitzer

I recently visited my local Costco store only to find Christmas decorations appearing on the shelves.

Wait a minute, I thought, it's 95 degrees outside (at least in Georgia); I still have lots of fall left; and I am "wearing white after Labor Day."

But the reality of it all is pretty striking when it was reported that the average American is expected to spend \$854 on gifts during the upcoming holiday season. Of course not all will, and many will spend much more, but spending anything that strains your finances or saddles you with any post-holiday debt is not good for your financial future.

With this in mind, I was struck by a recent blog from Holly Petraeus, the assistant director of the Consumer Financial Protection Bureau (CFPB), Office of Servicemember Affairs, called *December in August* on the CFPB Military Affairs Facebook page.

In the February 2012 edition of our magazine I wrote about Holly's position as our advocate and her passion for helping our troops and their families make better financial decisions on financial products and services that are particularly challenging for them.

She has continued to be active in this role and on July 13 testified before the U.S. Senate Committee on Veterans Affairs about some egregious abuses made evident from over 8,713 complaints from veterans and their family members since July 21, 2011 and the initiatives being taken to rectify these.

Over 43% of the complaints received are mortgage related, 17 percent credit card complaints, and 12 percent bank account or service complaints. The CFPB also recently began taking credit reporting and debt collection complaints.

CFPB has helped military families obtain monetary as well as non-monetary relief and has worked with the



Grandchildren of BG (Ret.) Tom and Judy Konitzer share a treasured tradition of their own "cousins Christmas gift exchange."

Department of Defense to create a financial module to be included in the recently revised Transition Assistance Program for those departing the military as well as initiatives to offer financial coaching services to those who have already transitioned.

Holly advises all servicemembers, veterans, retirees, and military spouses to go to [consumerfinance.gov](http://consumerfinance.gov) and file a complaint if they are having problems with a mortgage, credit card, student loan, or other consumer financial product. Now back to this blog about holiday spending. Some basic ideas on how to do this realistically include:

### Setting Reasonable Expectations

It is not too early to talk with your family and friends about realistic spending limits. Giving less expen-

sive options like homemade gifts, and picking one person out of a hat for large and extended families and buying one gift for them versus for everyone in the family is certainly very doable. The Konitzer family (7 children plus spouses) have been doing this for years and now the seven grandchildren have started their own exchange – sharing this way has become a treasured tradition!

### Plan, Budget, and Save

By making up the gift list now, you could gradually start setting money aside for these presents. Banks and credit unions sometimes offer a Christmas club or holiday savings accounts; and for those of you in my age group, remembering old fashioned layaway is yet another option.

## Keep the Big Picture in Mind

Things other than gifts can add up also. There are the big holiday dinners and parties, traveling to see family and friends, and by the way the increased electricity costs to run those massive holiday light displays. Keep these in mind.

## Look for Ways to Save

You can save money by catching early sales, comparison shopping, ordering from websites or stores offering free shipping, shopping at discount stores, and buying items that offer rebates.

## Watch Out for Costly Surprises

It is important to understand the terms and conditions when using gift cards or layaway plans. Expiration dates, and hidden fees on gift cards can make using these less valuable.

Sometimes credit cards are offered at the checkout which can save you a few dollars at the register today, but have high interest rates later.

## Avoid Holiday Debt Traps

Sometimes deals seem like bargains but don't rush to a store to get



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- Tell your story about other financial products

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military@cfpb.gov (202) 435-7000  
Consumer Financial Protection Bureau  
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a \$3,000 TV for \$2,000 if it is not something you planned to buy in the first place. Payday lenders who want to “help” you can be enticing too, so be careful here. When the holidays are over, you can be left with high-interest debts that can last for months. In the end, “holiday spending is short-term spending” Petraeus advises.

How long will the excitement last once the unwrapping frenzy is over? Holly recommends “... saving your money for long term goals like home ownership, college or a comfortable retirement may be the very best gift you can give yourself and your loved ones.”

I have to admit that thinking about “December in August” while I’m continuing to enjoy fall, is something I have rarely done, but today is a new day, and I think I’ll create a new plan. When the holidays actually arrive, I might be able to enjoy them more and, even better yet, pay for them!



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

# AAAA Awards Open For Nominations

## AAAA Functional Awards

Presented at the Cribbins Aviation Product Symposium *Suspense: November 1*

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

*Nomination forms for all of the AAAA Awards are available through the AAAA website: [www.quad-a.org](http://www.quad-a.org) or call the AAAA National Office at (203) 268-2450*

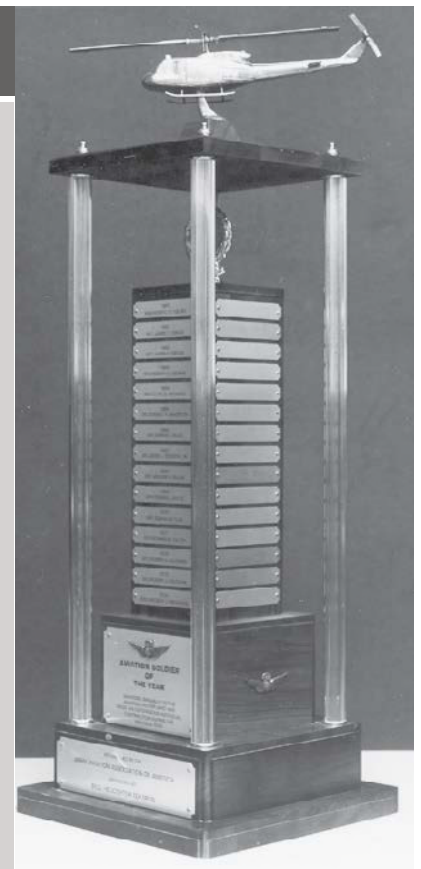
## AAAA National Awards

Presented at the AAAA Annual Mission Solutions Summit *Suspense: January 1*

- Joseph P. Cribbins Department of the Army Civilian of the Year
- James H. McClellan Aviation Safety
- Henry Q. Dunn Crew Chief of the Year
- 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
- AAAA Army Reserve Aviation Unit of the Year
- AAAA John J. Stanko Army National Guard Aviation Unit of the Year
- AAAA Active Army Aviation Unit of the Year
- AAAA Outstanding Aviation Unit of the Year
- Top AAAA Chapter of the Year
- Top AAAA Senior Chapter of the Year
- Top AAAA Master Chapter of the Year
- Top AAAA Super Chapter of the Year

## AAAA Hall of Fame Inductions

Presented at the AAAA Annual Mission Solutions Summit *Suspense: June 1*



Although Vietnam was the first large combat test of airmobility, air assault operations in Southeast Asia would not have been possible without certain key decisions a decade earlier . . . - LTG John J. Tolson<sup>1</sup>



# 50 Years Ago: Army Aviation in Vietnam — Setting the Stage

By Mark Albertson

General Tolson's reference to history is correct: Vietnam carried forth what had been started in Korea: reliance on the helicopter as a battlefield conveyance of troops and stores to force a decision upon the enemy. Rotary wing capability also represented an understanding of the new strategic/tactical reality that was the result of atomic weaponry.

The Marine Corps offers a case in point. LTG Roy Geiger, USMC, witnessed the Bikini bomb tests in 1946.

He immediately understood that America's atomic monopoly was tenuous and that the present conduct of amphibious operations was suddenly obsolete. Dispersal, then, became the order of the day.

Besides hitting the beaches, troops had to be landed inland. Committing troops beyond the beaches was nothing new, having been done via glider and parachute in World War II. However the former lacked an internal power source and was not always found to be reusable; while inserting troops with the latter was often dependent upon the whim of the breeze.

But rotary wing aircraft offered the promise of landing, supplying and evacuating troops with a continuity

and accuracy unapproachable with glider and silk; hence the Vertical Assault Concept. Yet the first combat test of the Vertical Assault Concept was not action on a hostile beachhead; rather, as a way to circumnavigate a brutal stalemate in the rugged mountain wastes of Korea.



The helicopter came of age in Korea as a useful conveyance of troops and stores in war.

LTG James M. Gavin, *Airborne Soldier Extraordinaire*, shared the Marine Corps' affinity for the helicopter as a solution to mobility. That light fixed wing and rotary wing aircraft were the steeds for the modern cavalry concept.

In his "Cavalry, and I Don't Mean Horses,"<sup>2</sup> Gavin argued that if forma-

tions of Sky Cavalry had been committed during the summer of 1950, they could have bolstered the flagging South Korean forces in the face of the armored onslaught of the North Korean People's Army. Sky Cavalry units could have slowed the Communist hordes until the arrival of heavier UN forces.

For both the Army and Marine Corps, the poor Korean road system played to the vertical talents of the helicopter, shuttling troops, evacuating wounded and moving supplies. The mountainous hinterland proved amenable to the helicopter over fixed wing aircraft, which needed longer runways for landings and takeoffs. Korea, then, sold the idea of airmobility.

At the time, airmobility meant the conveyance of troops and stores into combat from outside the battle zone.<sup>3</sup>

And while Korea seemed to herald the success of the concept, there arose a development after the war which threatened to relegate airmobility to insignificance.

President Eisenhower, not wanting America to become mired in another costly stalemate, favored "Massive Retaliation,"<sup>4</sup> as part of the New Look doctrine on defense. America's military posture would rely on a pow-



Mushroom cloud over Hiroshima. The atomic bomb spurred the use of the helicopter to disperse troops on the nuclear battlefield.

National Museum of the U.S. Air Force

erful deterrent based on atomic weaponry delivered by a peerless strategic bomber force, hence Strategic Air Command or SAC.<sup>5</sup>

This is a repeat of the post World War I era, where proponents saw the bomber and its alleged ability to destroy an enemy's capacity to wage war as a prophylactic to the ghastly horrors of the trenches on the Western Front.

The bomber was new technology; the foot soldier and his weapons? . . . old technology; therefore, the former would displace the latter.

This same rationale followed Korea; only now, the atomic bomb added to the luster of the bomber.

The Army's reduced stature in the New Look defense posture caused it to keep pace with tactical nuclear weaponry. Battlefield nuclear warheads on the Corporal, Sergeant and Honest John missiles; and, nuclear-tipped artillery projectiles like those fired from the M65 280mm were to offset the growing Soviet conventional capability.

In addition, the Pentomic Division was to replace the Triangular Division of World War II and Korea.<sup>6</sup> As a smaller and lighter division, the Pentomic structure was seen as a more mobile formation for the nuclear battlefield.

But along the lines of the Marines' Vertical Assault Concept, the Army was proceeding with the dispersal of troops on the atomic battlefield.

According to Project Binnacle,<sup>7</sup> the Army could expect upwards of 35% casualties on a monthly basis when engaging in an atomic war in Europe; a prognosis based on a manpower strength of 2,000,000. A dreary prospect when one considers that the Army had gone from 1.5 to 1.0 million men.<sup>8</sup>

Enterprising officers like COL Jay D. Vanderpool continued to experiment with the helicopter, molding it as a gun platform and, continuing the idea of rotary wing aircraft as the battlefield conveyance for troops on a nuclear battlefield; and, as providing that edge in mobility in the face of superior Warsaw Pact numbers in Europe.

But the Soviets forged ahead with a nuclear arms buildup of their own. And as the Eisenhower Presidency gave way to the Kennedy Administration, a new doctrine appeared: "Flexible Response."

The Kennedy White House saw a more balanced approach to deterrence; and that meant a larger and more mobile conventional capability



**Boeing B-52B, stablemate of the B-47, formed the backbone of President Eisenhower's post-Korean War strategic deterrence known as 'Massive Retaliation.'**

to supplement the nuclear arm. The new administration's accent on mobility translated into an increased reliance on the helicopter.

The Rogers Board of 1960 and the Howze Board of 1962 indicated the direction in which the Army was headed, based in part on the post-Korean War endeavors of such officers as Hutton, Vanderpool, Howze, Gavin, Bunker and others.

But like the Marine Corps with the Vertical Assault Concept, the Army's version of airmobility would not see its first test on the nuclear battlefield; rather, in another post-World War II civil war turned test of strength between global competitors: Vietnam.

### Notes

1. See page vi, Preface, *Vietnam Studies: Airmobility 1961-1971*, by LTG John J. Tolson.

2. *Harper's*, April 1954.

3. See pages 20 and 21, chapter 1, *Interservice Rivalry and Airpower in the Vietnam War*, by Dr. Ian Horwood. Dr. Horwood describes Airmobility as, "Only slowly had the combination of the words "air" and "mobility" acquired this meaning. Back in the 1940s and 1950s, the term 'air-mobility' had simply meant the air transport of troops and supplies into the combat zone from some point outside it. Dramatic enough in its day, this air mobility was not to be confused with the deeper penetration . . . performed by airborne parachute and glider forces. It did not originally imply dedicated airmobile units, or organic fire support and, despite the increasingly frequent use of the term 'air assault,' neither did it imply opposed landings by airmobile troops."

4. President Eisenhower is reputed to have remarked, "...never again would the United States become bogged down in a war like the one in Korea, where the full brunt of American power could not, or would not be applied." See pages 22

and 23, chapter 1, *Anything But: Joint Air-Ground Training at the U.S. Army Ground Combat Training Centers*, LTC Phillip B. Barks, USAF.

5. The Navy was to bolster SAC with a large force of aircraft carriers capable of accommodating nuclear weapons.

6. The Triangular Infantry Division was based on a combat power of three infantry regiments, each of which, on July 15, 1943, boasted a strength of 3,256 men, total strength of 14,253 troops per division. See page 183, Chart 19, Chapter VII, "The Crucible—Combat," *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades*, by John B. Wilson. By July 7, 1948, the Department of the Army authorized the standard infantry division to total 18,804 men, based on three combat regiments of 3,774 men each. See page 226, Chart 23, Chapter VIII, "An Interlude of Peace," *Maneuver and Firepower*, by Wilson. On February 1, 1960, the Pentomic Infantry Division stood at 13,748 men, based on five battle groups or regiments of 1,356 men each. See Chart 32, page 283, Chapter X, "The Search for Atomic Age Division," *Maneuver and Firepower*, by Wilson.

7. "... the Advanced Study Group at the Army War College developed Project Binnacle, a blueprint for the organizational structure of the Army for 1960-1970.

Binnacle was predicated on the assumption that the Soviet Union and the United States/NATO would fight a major ground war for the control of Western Europe in which hundreds of nuclear weapons would be used and hundreds of thousands of casualties would be inflicted . . . See page 81, chapter 3, "The New Division," *Intimidating the World: The United States Atomic Army 1956-1960*, by Paul C. Jussel

8. In June 1950, the Army stood at 600,000 men. In June 1953, manpower strength was some 1,500,000. Annual appropriations went from \$6 billion to \$17 billion over the same period. After the Korean conflict, appropriations fluctuated between \$9 to \$10 billion with manpower hovering at or below 900,000. While these reductions were modest compared to earlier standards, the Army was still relegated to second class citizenship within the New Look defense posture. See page 216, Chapter VI, "The Post-Korean War Army," *From Root to McNamara, Army Organization and Administration*, by James E. Hewes Jr.



*Mark Albertson is an award winning historian and contributing editor to ARMY AVIATION magazine.*

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

## Bell Helicopter and Lockheed Martin Team on V-280 Valor



LOCKHEED MARTIN GRAPHIC

Bell Helicopter, a Textron Inc. company, and Lockheed Martin announced on Sep. 10, they will work as a team on the Bell V-280 Valor™, Bell's entry into the joint multi-role or future vertical lift program. Lockheed Martin is the first of Bell Helicopter's V-280 program tier one team members. The joint multi-role demonstrator program is a precursor to what the Army is calling future vertical lift, a series of next-generation vertical takeoff and landing aircraft that will replace the aging helicopter fleet. Prototypes for a new platform could be flown as early as fiscal year 2017. AVX Aircraft Company, Bell Helicopter Textron, Inc., Karem Aircraft, Inc., and Sikorsky Aircraft Company, were each awarded a Technology Investment Agreement on Oct. 2 by the U.S. Army Aviation and Missile Research, Development and Engineering Center (AMRDEC) to refining their initial designs and making preparations toward potentially building and flight-testing a joint multi role technology demonstrator (JMR TD) aircraft. Industry officials expect that the Army will choose two vendors to build demonstrators that will fly sometime between 2017 and 2019.

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

**The Boeing Company, Mesa, AZ** was awarded a \$22,706,288 cost-plus-incentive-fee, non-option-eligible, non-multi-year contract modification of a contract for development and demonstration of the AH-64 Apache Block III system. Performance location will be Mesa, AZ.

**The Boeing Company, St. Louis, MO**, was awarded a \$14,401,508 firm-fixed-price, option eligible, non-multi-year contract for acquisition of four Longbow crew trainers for the Apache helicopter program. Performance location will be St. Louis.

**The Boeing Co., Ridley Park, PA**, was awarded a \$19,253,048 cost-plus-fixed-fee, non-option-eligible, non-multi-year contract modification of a contract to obligate funding for sustaining engineering on delivery order 0261 of basic ordering agreement for the MH-47G new build. Performance location will be Ridley Park.

**EADS North America**, Herndon, VA, was awarded two contracts: —a \$12,921,227 modification to a previously awarded firm-fixed-price, option-filled contract for contractor logistics support for the Army's aviation assets with a cumulative total face value of \$2,265,423,694; work will be performed in Columbus, MS; and, —a \$21,767,416 modification to a previously awarded firm-fixed-price, option-filled contract for continued contractor logistical support services with a cumulative total face value of \$2,303,079,504.

**General Atomics Aeronautical Systems, Inc.**, Poway, CA, was awarded three contracts:

—a \$199,746,895 firm-fixed-price, option-eligible, non-multi-year contract to provide MQ-1C Gray Eagle fiscal year 2013 full rate production and fiscal 2012 hardware backfill requirements applicable to the Gray Eagle Unmanned Aircraft System – performance location will be Poway;

—a \$70,163,380 cost-plus-incentive-fee, non-option-eligible, non-multi-year contract to conduct MQ-1C Gray Eagle 4.3.2 software development and depot repair of related spares – performance location will be Poway; and,

—an \$86,556,544 cost-plus-incentive-fee modification which definitizes a letter contract modification for fiscal year 2013 Gray Eagle performance-based logistics product support for Block 1 program of record and quick reaction capability – performance location is Poway.

**Honeywell International Inc.**, Phoenix, AZ, was awarded a firm-fixed-price, option-filled contract with a maximum value of \$29,375,653 for the procurement of T-55 engines for the CH-47 Chinook aircraft with a foreign military sales option included for potential use in the future. Performance location and funding will be determined with each order.

**Longbow LLC**, Orlando, FL, was awarded two contracts:

—a \$6,778,000 modification to a previously awarded firm-fixed-price contract for services in support of the low rate initial production of Radar Electronics Unit and Unmanned Aerial System Tactical Common Data Link Assembly – the cumulative total face value of this contract is \$182,288,374; and,

—a \$7,457,989 multi-year, cost-plus-fixed-fee contract with options which exercises options for engineering services in support of the Laser Hellfire Missile program – performance location is Orlando.

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### Changes of Command

#### White Takes the Reins at 21st Cav



U.S. ARMY PHOTO BY ZIST CAV BDE

The 21st Cavalry Brigade (Air Combat) welcomed **COL John C. White** (left) as its new commander during a change of command ceremony hosted by MG Anthony R. Ierardi (center), commanding general of the 1st Cavalry Division, on Friday, May 31, 2013 at Sadowski Field, Fort Hood, TX. Outgoing commander, COL Neil S. Hersey (right), will assume command of Task Force ODIN Afghanistan.

#### Warriors Welcome Altieri



U.S. ARMY COURTESY PHOTO

**COL Jayson A. Altieri** (left) accepts the 110th Aviation Brigade colors from MG Kevin W. Mangum, U.S. Army Aviation Center of Excellence and Fort Rucker commanding general, as outgoing commander, COL Kevin J. Christensen (right) looks on during a change of command ceremony held on Aug. 9, 2013 at Howze Field, Fort Rucker, AL. The 110th Aviation Brigade, which flies close to 500 aircraft daily, is responsible for training 1,300 Army, Air Force, and international military aviators annually in the AH-64 Apache, CH-47 Chinook, and UH-72

Lakota helicopters. The brigade is also responsible for five Army airfields, 7 stage fields, and 83,000 square miles of training area. Altieri has had multiple deployments to Iraq and Afghanistan and is a Master Army Aviator with more than 2,000 hours. Christensen is currently serving on the Joint Staff, in the Pentagon, Washington, D.C.

#### Daniels Takes Over the Flying Dragons



U.S. ARMY COURTESY PHOTO

The 6th Battalion, 52nd Aviation Regiment, U.S. Army Reserve, conducted a change of command ceremony on the flight line at Los Alamitos Army Airfield in Orange County, CA on June 30, 2013. Pictured from left to right are outgoing commander, LTC James G. Hollingsworth; BG Troy Kok, Commanding General, 11th Aviation Command; and incoming commander, **LTC Lori L. Daniels**. The Flying Dragons were recognized as the Army Aviation Association of America's Fixed Wing Unit of the Year for 2012.

### Change of Charter

#### Brashear New PM NSRW



U.S. ARMY PHOTO BY RANDY TISOR, PEO AVIATION PUBLIC AFFAIRS

Dennis Williamson, PEO Aviation chief of staff, presents **COL James B. Brashear** with the Charter for the Non-Standard Rotary Wing Aircraft Project Office Aug. 7 during a change of charter ceremony held on Redstone Arsenal. Brashear assumed responsibility for the project office from

Kelvin Nunn who had held the position for 10 months and will return to his former position as deputy project manager for the office. Brashear most recently served as the director of the Defense Science and Technology Center dating to 2009. He had also previously served as the first centrally selected product manager for the Light Utility Helicopter Product Office, PEO Aviation. The NSRWA Project Office manages a diverse fleet of aircraft to include MD-500E, MD-530F, MD-600N, AH-6i, Bell 412, UH-1, Huey II, AH-1 and AW-139 helicopters

### Promotions

#### McDonald Promoted



U.S. ARMY PHOTO BY NICK VAN WALKENBURGH, PM CARGO

**Timothy D. McDonald** was promoted to lieutenant colonel at a ceremony in the Project Office for Cargo Helicopters building, Redstone Arsenal, AL on Sep. 3. MG William "Tim" Crosby (middle right), Program Executive Officer for Aviation, presided over the ceremony. Also pictured are McDonald's wife, Amanda, and son Logan. McDonald served as an Executive Officer to the PEO and later as the Joint Heavy Lift Branch Chief at the Directorate of Combat Developments. He also served as Assistant Product Manager for Product Improvements in the Project Office for Cargo Helicopters and as APM for Modifications and Production at PM Non-Standard Rotary Wing Aircraft. He is now serving as the Systems Integration Officer for the U.S. Army Special Operations Aviation Command, stationed at Fort Campbell, KY.

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### Deployments/Redeployments

#### 4-6 Cav First U.S. Army Rotational Unit to ROK



U.S. ARMY PHOTO BY SSG BRYAN LEWIS

Soldiers and families from 4th Squadron, 6th Cavalry Regiment, 16th Combat Aviation Brigade say final goodbyes Sept. 24 at the 4-6th hangar on Gray Army Airfield prior to the main body rollout for a nine-month rotational deployment to South Korea. Army officials announced the deployment earlier in Sep. in support of the U.S. defense commitment to South Korea as specified by the mutual defense treaty and presidential agreements.

The Redcatcher Squadron's 380 members will operate in support of U.S. 8th Army, as part of 2nd Combat Aviation Brigade, 2nd Infantry Division as the first U.S. rotational land force in the region. The unit, commonly referred to as the 4-6th Attack Reconnaissance Squadron (ARS), deployed with 30 OH-58D Kiowa Warrior helicopters. The aircraft were shipped from Tacoma, WA, and plans call for the squadron to leave the helicopters behind after the deployment is completed for use by the follow-on rotational unit.

### Awards

#### Colorado Recognizes Support Efforts



U.S. ARMY PHOTO BY SGT. JONATHAN C. THIBAUT, 4TH CAB PUBLIC AFFAIRS

COL Daniel Miller, right, Title 10 deputy to Dual Status commander, Joint Task Force Centennial, awards the Colorado National

Guard Achievement Medal to LTC Tyler Smith, left, battalion commander, and 1SG Damion Vaughn, middle, Company A, both from 2nd General Support Aviation Battalion, 4th Aviation Regiment, 4th Combat Aviation Brigade, 4th Infantry Division at Butts Army Airfield on Fort Carson, CO, Sep. 20, 2013.

They were recognized for their commitment to the rescue and recovery operations that were conducted with the Colorado National Guard and other emergency agencies involved in the Colorado floods.

#### Gallagher Honored at Ft. Dix



U.S. ARMY PHOTO BY ED MINGIN, TSC/MAR, FT. DIX, NJ

COL (Ret.) John Gallagher (center), former commander of the 244th Aviation Brigade (U.S. Army Reserve), 11th Aviation Command, and retired Army colonels Don Tretola (left), and Al Squitieri, are inducted as Honorary Commanders of the Army Support Activity-Fort Dix by COL Jeffrey Doll, ASA commander, and CSM Steven Whittaker, ASA command sergeant major, Sept. 25. The Honorary Commander's Program mission is to educate key community leaders and the public about the varied missions performed by Army Support Activity Fort Dix that has community involvement as part of

the activity's team. Gallagher, Tretola, and Squitieri will serve as community ambassadors for the next year.

#### Kopra Announced for ISS Crew



NASA PHOTO

NASA and its international partners have appointed future crew members for the International Space Station. NASA astronaut Tim Kopra and European Space Agency astronaut Tim Peake are scheduled to launch in December 2015 and return to Earth in spring 2016. They will join the Expedition 45 crew members in orbit and will remain aboard as part of Expedition 46 with yearlong expedition Commander Scott Kelly and Flight Engineer Mikhail Kornienko. This will be the second long-duration spaceflight for Kopra, a retired U.S. Army colonel, helicopter pilot and graduate of the U.S. Military Academy. Kopra was a flight engineer aboard the station during Expedition 20 in 2009. He launched with the STS-127 crew aboard the Space Shuttle Endeavour on July 15, 2009 and returned to Earth with the STS-128 crew aboard the Space Shuttle Discovery on September 11, 2009.

During the two shuttle missions and tour of duty aboard station, Kopra performed one spacewalk totaling 5 hours and 2 minutes, executed assembly tasks with the space station and Japanese robotic arms, and conducted numerous science experiments.

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This will assure that your email is not bounced by "spam" filters.

**Flight School Graduations**

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.

**31 Officers, August 8**
**IERW AH-64D Track  
Class 13-920**

WO1 Ryan W. Boschert

**IERW UH-60 Track  
Class 3-002**

WO1 Richard T. Machina – DG  
LT Curtiss J. Shorkey\* – DG  
LT Jacob I. Lee – HG  
WO1 Ricky E. Wise – HG  
LT Zachary L. Betts  
WO1 Justin L. Blakemon  
WO1 Patrick J. Gargan\*  
WO1 Derek C. Haskin\*  
LT Andrew J. Klutz  
LT Brady L. Lemons  
LT Bradley M. Martin\*  
LT Michael Mitchell\* I  
LT Eric M. Page  
WO1 John J. Seeger\*  
WO1 Jose M. Silva  
WO1 Holly N. Simon\*  
LT Christopher J. Trawick  
LT David C. Wendt

**IERW UH-60A/M Track  
Class 13-923**

WO1 Matthew A. Bricker – DG  
LT Matthew B. Dubie – DG  
WO1 Brent G. Allred\* – HG  
WO1 Matthew D. Bermel\*  
LT Matthew S. Corriveau\*  
WO1 Brandon M. Dean  
LT Landen M. Ellyson\*  
LT Timothy S. Kranz\*  
WO1 William D. Meier  
WO1 Justin R. Roe  
WO1 Andrew Salvador  
WO1 Abraham L. Swisher

**60 Officers, August 22**
**IERW AH-64D Track  
Class 13-922**

WO1 Derek J. Zaleski\* – DG  
WO1 Jason L. Smitherman\* – HG

WO1 James Allen  
WO1 William J. Bell  
WO1 Loren Berg  
LT Brady T. Boyd  
WO1 Byron J. Covington  
WO1 Joshua B. Jackson  
LT Neal E. Jelsma  
WO1 Daniel S. Kennedy  
CPT Steven E. Mohr  
WO1 Paul E. Nelson  
WO1 Matthew C. Powell  
WO1 Brian D. Verges  
WO1 Rebekah M. Wottge

**IERW CH-47D Track  
Class 13-003**

WO1 Craig E. Hannon – DG  
WO1 Daniel R. Fenstemaker  
LT Derek J. Lynaugh  
LT Alyson Miller  
WO1 Garrett A. Scholten

**IERW OH-58D(R) Track  
Class 13-924**

WO1 Kevin F. Burke – DG  
LT Jared M. Gantt – DG  
WO1 Brian D. Bellamy\*  
LT Eric R. Bowerman  
WO1 Matthew A. Brown\*  
LT Tyler C. Edstrom  
WO1 Travis L. Harrison  
LT Benjamin H. Isaacs  
LT Lukas C. Montion  
WO1 Mitchell V. Morse  
LT James M. Reaves\*

**IERW UH-60 Track  
Class 13-003**

LT Rumeul A. Lewis\* – DG  
WO1 Barry C. Perkins – DG  
LT Michael W. Volkert – HG  
WO1 Billie R. Bannister  
WO1 David C. Campbell  
LT Charles F. Christianson  
LT Matthew J. Conners  
LT Jarred C. Cook\*  
LT John P. Gomez  
WO1 Justin S. Harvey  
WO1 Peter J. Leslie  
LT Michael J. Pearce  
LT Daphne R. Piper  
WO1 Abby P. Siakpere  
WO1 Patrick W. Stark  
WO1 Jeffrey W. Steere  
LT Joshua M. Tauer

**IERW UH-60A/M Track  
Class 13-924**

WO1 James T. Bowman – DG  
LT Jon E. Ruble – DG  
WO1 Richard S. Augustine  
WO1 Jonathan Z. Campbell

WO1 Douglas S. Crawshaw\*  
LT Jonathan A. Foti  
WO1 Nicholas S. Freeman\*  
LT Kyle F. Hughes\*  
LT Christopher D. Matteson  
LT Paul J. Stella\*  
CW2 Drew J. Valsvig\*  
WO1 Alexander J. Wales

**14 Officers, September 5**
**IERW UH-60A/M Track  
Class 13-001**

WO1 Brian R. Goff ---- DG  
LT Matthew F. Rongey\* ---- DG  
LT William E. Mayne ---- HG  
LT Stephen A. Araniecke  
LT Christopher S. Cannon\*  
LT Joel Castillo  
LT Joel P. Heifner  
LT Darrek R. Ladermann  
WO1 Benjamin D. Lind  
WO1 Philip L. McAuliffe  
LT Katlyn C. Pearsall\*  
LT Patrick J. Peterson  
WO1 Andrew Salvador

**IERW CH-47D Track  
Class 13-003**

WO1 Michael Horrigan

**80 Officers, September 19**
**IERW AH-64D Track  
Class 13-924**

WO1 Keith A. Rames – DG  
LT Brain E. Ward – DG  
WO1 Matthew A. Bailey – HG  
WO1 David L. Andraske  
WO1 Aaron B. Bronson  
WO1 Alexander J. Chambers  
LT Jared A. Hoffman  
WO1 Kristopher R. Knue  
LT Michael D. Kromenacker\*  
WO1 Miguel Franco S. Lopez  
LT Benjamin E. McPherson  
WO1 David M. Nerio  
WO1 David W. Reynolds  
WO1 Anthony J. Rocha  
LT Sean D. Springer\*  
LT Seth S. Winchel  
LT Tai-Shan Zen

**IERW CH-47D Track  
Class 13-005**

WO1 Joshua D. Carter – DG  
LT Charles B. Auer\*  
WO1 Josue M. Coronado  
LT Brandon S. Long  
WO1 Jesse E. Montes  
WO1 Michael F. Murray

**IERW OH-58D(R) Track  
Class 13-002**

WO1 Chris D. Bridges – DG  
LT Gray A. Slother – DG  
LT Jennifer L. MacGibbon – HG

LT Matthew W. Carter\*  
LT Alexander J. Cleppe  
WO1 Nicholas S. Hash  
LT John R. Nachtmann  
WO1 Weston D. Parker  
LT Brendan J. Podszus  
WO1 Eric R. Santiago\*  
LT Levi J. VanPelt

**IERW UH-60 Track  
Class 13-004**

WO1 Stephen J. Connelly – DG  
LT Timothy G. Swenson – DG  
LT Daniel T. Burrow – HG  
WO1 Justin M. Ables  
LT David J. Alexander  
WO1 Matthew J. Corica\*  
LT Brian A. Degelow  
LT Tatum M. Donnelly  
LT Robert B. Forney\*  
WO1 James C. Kerwin  
LT Laura K. Kirchner  
LT Timothy P. McAndrew  
LT Ashleigh M. Pellerin  
LT Jared R. Varney\*  
LT Benjamin Madera Jr.\*  
WO1 Daniel M. South

**IERW UH-60 Track  
Class 13-005**

WO1 Eric A. Dietz – DG  
LT Ryan L. Silver\* – DG  
LT Robert J. Ferrainolo\* – HG  
LT Spencer J. Boyd  
LT Glenn P. Dorth  
LT Hiram A. Figueroa Cruz\*  
LT Daniel J. Fuentes\*  
LT Jonathan J. Lafitte  
WO1 Bo B. Lamar  
LT James D. Reeves\*  
LT Bethany M. Rogers\*  
LT Matthew P. Sandoval\*  
WO1 Jorge L. Santiago  
LT Travis F. Siegle\*  
WO1 Frederick S. Simpson  
WO1 Ryan F. Wann

**IERW UH-60A/M Track  
Class 13-002**

LT Brett D. Mather\* – DG  
WO1 John S. Worth\* – DG  
LT Derrick P. Bouldin, Jr. – HG  
WO1 James R. Aldana, Jr.\*  
WO1 Christopher C. French\*  
LT Jared J. Heiney  
LT Jonathon T. Hingey\*  
LT Michael W. Maddox  
LT Daniel G. Prial\*  
LT Lauren M. Rattan  
LT Michael B. Rothenberger  
LT Ryan F. Stapleton\*  
LT Michael H. VanOteghem\*  
WO1 Casey B. Wilcoxon\*

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

### Advanced Individual Training (AIT) Graduations

AAAA congratulates the following graduates of the indicated Advanced Individual Training (AIT) courses at Fort Rucker, AL.

#### Aircraft Pnedraulics Repairer (15H)

##### Class 13-009, August 2 8 Graduates

PFC Carson Cherry – DG  
SPC Oluwasegun Ayomide  
PFC Courtney Grubbs  
PFC Desean Owens  
PV2 Robert Stevenson  
PFC Christopher Vanblarcom\*  
PFC Devaun Wilridge  
SPC Christopher Yerkes

##### Class 13-010, August 23 12 Graduates

PV2 Michael R. Jones – DG  
PFC Jeremy W. Carder – HG  
PFC Douglas E. Brisbois  
PV2 James E. Cornelius III  
PV2 Devon R. Dahl  
PFC Stager L. Horton  
PV2 Blake D. Johnson  
PFC Elijah C. Lloyd  
PV2 Cristian R. Macias-Rocha  
PFC Kevin R. O'Neal  
PVT Alex M. Schumacher  
PFC Justin W. Smead

##### Class 13-011, September 20 11 Graduates

PV2 Brent K. Conley – DG  
PV2 Stephen G. Bailey  
PFC Lucas A. Bethune  
SPC Cavilyn D. Keown-Schaus  
PFC Brandon L. Lynema  
PVT Johnathan M. McCraw  
PFC Kevin L. Nass  
PV2 Mark R. Nyhus  
SPC Danny Rosado-Matias  
SPC Roberto E. Suarez  
PV2 Tre E. Webster

#### Aviation Operations Specialist (15P)

##### Class 13-031, August 2 9 Graduates

PVT Joshua Martel – DG  
PFC Samantha Hogset – HG  
PFC Talia Ames  
PV2 Austin Craig  
PFC Sarah Gaither  
PFC Kelsey Gaukel  
PVT Alex Maldonado  
PFC Caleb Mills  
PV2 Jose Sanchez

##### Class 13-032, August 9 12 Graduates

PV2 Jessica Peebles – DG  
PFC Dustin Schwinger – HG  
PFC Tatiana Brown  
SPC Jennifer Cantrell  
PV2 Clarence Collom  
PV2 Robert Geehreg  
PFC Trey Grumann  
PV2 Dionte Nathaniel  
PVT Blair Norwood  
PV2 Myrnaliz Ortiz-Rivera  
PFC Alexander Paul  
PFC Jarrod Plant

##### Class 13-033, August 16 9 Graduates

PFC Ashton Addington  
PFC Nicholas Artzner  
PVT Raymond Gustafson  
PVT Joshua Harper  
PVT Mathew Jespersen  
PV2 Morgan Satterfield  
PFC Earl Truzyz  
PFC Mike Valladares  
PV2 Alexander Watson

##### Class 13-034, August 23 14 Graduates

PFC Olivia B. Vinzant – DG  
PFC Nicole M. Marshall – HG  
PVT Jasmine M. Augustus  
PVT Aspen M. Bauhs  
PFC Rickeshia N. Calhoun  
PVT Michael A. Carter  
PVT Iesha L. Collins  
PVT Cory J. Meyers  
PFC Bryan T. Moreno  
PFC Connor S. Murray  
PFC Alberto Rincon  
PVT Richard W. Wakefield  
PFC Torre R. Waldvogel  
PV2 Adam M. Wilcox

##### Class 13-035, August 29 8 Graduates

PFC Holly M. Lider – DG  
PV2 Brittaney R. Kendall – HG  
PFC James D. Bullock  
PVT Brandon D. Clark  
PVT Austin F. Reed  
PVT Tye R. Smith  
PV2 Jessica M. Stockinger  
PV2 Joseph E. Taylor

##### Class 13-036, September 6 11 Graduates

PFC Shantell M. Nimmons – DG  
PFC Christopher A. Shellko – HG  
PFC Tyler S. Brownson  
PVT Kayla N. Christel  
PV2 Briana Colon  
PVT Antwann J. Cullars  
PVT Dominique M. Joniaux  
PFC Julianne A. Prevost

PVT Antajuan Simpson  
PVT Giancarlo Valdez  
PV2 Esley Valentin-Crespo

##### Class 13-037, September 13 11 Graduates

PVT Je'Quan Cullors – DG  
PVT Ashley M. Aaron  
PV2 Andrew J. Donnelly  
PV2 Crystal M. Gonzalez  
PVT Brandon L. Hartman  
PFC Daniel Hernandez  
PV2 Tyree D. James  
PFC Jackelyn Pagan-Rivera  
PV2 Gabriel E. Rodriguez  
PVT Paul D. Swann  
PVT William T. Thompson

##### Class 13-038, September 20 14 Graduates

PFC Andrew T. Dillon\* – DG  
PVT Ian W. Brandt  
PFC Danean J. Coleman  
PV2 Peter Jay Ross A. Cruz  
PVT Joseph M. Dirig  
PVT Sadrack Joseph  
PFC Paige A. Hawkins  
PV2 Anthony Hostler  
PVT Shomays T. Maiava  
PVT Travis P. McClellan  
PFC Alfredo J. Mendez  
PVT Chelsea M. Morales  
PVT Duayne R. Peters Jr.  
PVT Jonathan E. Villarino

##### Class 13-039, September 27 11 Graduates

PFC Michael N. Marris – DG  
PV2 Scarlett M. Blaeser  
PVT Sammae R. Boyer  
PV2 Roberto J. Concepcion  
SPC Daniel S. Etheridge  
PV2 Latrell R. Foster  
PFC Anna M. Green  
PVT Jamal E. Pough  
PFC LaShundra L. Rivers  
PFC Christopher D. Tanner  
SPC Joel S. Turpin

#### Air Traffic Control (ATC) Operator (15Q)

##### Class 13-014, August 2 8 Graduates

PVT Jonathon Lander – DG  
PV2 Kenry Trowers – HG  
SPC Christian Johnson

PFC Peter Karol  
SPC Samuel Meinhart  
PV2 Talon Petersen  
PFC Joseph Pyle  
SPC Devin Steiner

##### Class 13-015, August 9 10 Graduates

SPC Tony Banks  
PV2 Whitney Bierilo  
PFC William Elliott  
PFC Michael Ferguson  
SPC Michaela Granada  
SPC Joseph Henson  
PFC Matthew Liebrecht  
PV2 Taylor Luellen  
PV2 Michael Rutherford  
SPC Vera Seurattan

##### Class 13-016, August 23 10 Graduates

PFC Erick C. Douglas – DG  
PV2 Rebecca M. Baca  
SPC Billy S. Bullock Jr.  
PFC Felicia V. Crespo  
PV2 Adria B. Davis  
PFC Oliver W. Dillingham  
PVT David S. Jumper  
PV2 Jason D. Payne  
PFC Seth T. Prox  
PFC Andrew C. Smith

##### Class 13-017, August 29 4 Graduates

SPC James T. Carroll – DG  
PFC Timothy P. LaVallee  
SPC Morgan P. Messina  
PV2 Craig L. Oliver

##### Class 13-018, September 13

SPC Joseph T. Eley  
PV2 Tabatha N. Futch  
PFC Codylee C. Lacrosse  
SPC Patrick A. LeBourdais  
PFC Jeremy Q. Zachery

##### Class 13-019, September 20

PFC Kourtney X. Martin – DG  
PFC Carl Dorff  
PV2 Michael B. Poindexter Jr.  
PV2 Salvatore J. Vicari IV  
SPC Mavia J. Williams

\* = AAAA Member

+ = Life Member

HG = Honor Graduate



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## Congress Returns from Summer Recess

As Congress returned from their summer recess following Labor Day, both the House of Representatives and Senate continue to face daunting fiscal dilemmas as the fiscal year came to a close and the Continuing Resolution (CR) remains unresolved leading to the current government shutdown. Currently Congress is addressing the two most pressing items at hand.

The House Republicans are challenging the funding for the President Obama health care plan directed in the Affordable Care Act (ACA) which commenced enrollment on October 1st of this year, while the Senate is moving forward with language within the CR that would prioritize payments in the event that the National Debt ceiling is reached.

With all of these challenges and no resolution in sight, the government was shut down as of October 1st, which includes the possibility of having the military report to duty without pay later in the month of October if the CR is not resolved, and causing over 800,000 government employees to be immediately furloughed without pay.

With much at stake, it is expected that the Senate may pass the CR even though the House language effectively defunds the ACA Concerning military pay and allowances, the original Senate amendment called for a 1.8% pay increase in Fiscal Year 2014 (FY14). The House provision only supported a 1% increase and based on the need to draw certain concessions, the pay raise will likely end up at 1%.

On the second day of the government shutdown, President Obama called key ranking members from both the House and the Senate to the White House in the hope of coming to some sort of compromise within the next several days. There is no doubt that President Obama will not tolerate the de-obligation of funds to support the ACA since this was one of his core tenants he campaigned on prior to being elected into his first term.

Despite the shutdown, DoD will still be required to have 1.4 million essential government employees and 1.3 million essential military personnel to continue to report for duty. Although the law stipulates that these essential personnel must be paid, it does not specifically provide a timeline for when these payments will be made.

For military personnel in general, all



## LEGISLATIVE REPORT

By COL (Ret.) William H. Morris

AAA Representative to The Military Coalition (TMC)

will receive their pay on October 1st; however, the follow-on payments may be at risk depending on when a CR would be passed. Based on the date of approval, the CR must be approved not later than October 7th for military members to receive their mid-month pay on the 15th.

As far as the Veterans Administration (VA) is concerned, all services remain operational during the government shutdown to include VA medical facilities and some administrative offices. All benefit checks will continue to be issued but applications for benefits will temporarily be stopped until the VA receives normal funding outlays once the CR is validated.

The looming crisis on the horizon is not necessarily the October 1st CR expiration date which triggered the government shutdown, it's the fact that the Treasury Department could run out of cash sometime by the end of October. In this scenario, the department would likely make interest payments to U.S. Government Debt bondholders, checks for social security recipients, government workers and military members.

Finally with all of the other elements at play within Congress it is likely that the National Defense Authorization Act (NDAA) for 2014 will be potentially delayed until the late November / early December timeframe. The late year approval of the NDAA seems to be a trend as the last two NDAs (2012/2013) were approved in the month of December.

### Warrior Care

The DoD Office of Warrior Care Policy provides a wealth of information and an interactive Warrior Care Blog which informs disabled veterans and their families about vast resources and information providing assistance to those in need. Recently a new caregiver resource directory has been released with valuable information to those wounded veterans requiring home caregiver support.

Those interested in more information should visit their web page at <http://warriorcare.dodlive.mil/>; a hard copy can be requested by email to [info@nrd.gov](mailto:info@nrd.gov).

You will receive a copy of this resource in approximately two weeks.

### DoD Leadership Warns of Continued Cuts

OSD Comptroller Robert Hale at a September 5th meeting of the Reserved Forces Policy Board stated that pay raise freezes and troop reductions would be the norm as the DoD moves forward to meet required cuts under sequestrations.

Although he acknowledged that the Army and Marines would face the brunt of the troop reductions he failed to point out that the Navy and Air Force would see their fair share of reductions as well.

Mr. Hale and others in OSD continue to champion reductions in pay raises and compensation as a measure to help manage the expanding personnel costs which comprise the largest portion of the DoD budget.

The 1% pay raise that OSD has submitted is facing opposition from some members of Congress and if it were to prevail it would be the first time that military pay raises would be below the Employment Cost Index (ECI) since 1998. Mr. Hale's most notable quote was "I think we will go after military compensation aggressively," signaling that after 12 years of persistent conflict the support of initiatives to take care of service members and their families has changed significantly in light of the current fiscal crisis.

The Military Coalition, of which AAA is a member, recently sent a letter of concern to both the Chairman of the Senate and House Armed Services Committee to reconsider the challenging cuts of Sequestration and to urge them not to agree with the 1% pay raise and support the Senate's version of the Continuing Resolution which would provide for a 1.8% raise.

## New Members

### Air Assault Chapter

CW5 John Joseph Blank Jr.  
CW5 Thomas Clark  
CPT Nicholas Craig  
SFC Michael S. Felcher

### Aloha Chapter

SFC Cesar A. Ramirez II  
MAJ Matthew Scher

### America's 1st Coast Chapter

WO1 Christopher E. Dennis  
MSG Wilfredo Figueroa Jr.  
1SG John Elliott Hoff Jr.  
CW3 L. Robert Lyman  
CPL Robin E. Merkle  
CW2 Mark Prewitt

### Arizona Chapter

MAJ Kenneth Darnall

### Aviation Center Chapter

WO1 Paul B. Angeleo  
SFC Kenneth C. Ashline  
WO1 Richard S. Boggs  
2LT Thomas R. Brown  
WO1 James T. Brzezinski  
WO1 Brant C. Bump  
WO1 Harold F. Caro  
2LT Sean M. Carson  
WO1 Michial J. Cebe  
WO1 Sun Min Chun  
2LT Jeremy N. Cook  
CPT Curtis G. Cullen  
2LT Benjamin D. Dagg  
WO1 Christian M. Davis  
2LT Jordan M. Dosch  
2LT Rakesh Dubey  
WO1 Clark B. Eliason  
WO1 Matthew J. Glasscock  
2LT Stuart J. Godlasky  
2LT Patrick R. Gunn  
WO1 Charles H. Hackett  
2LT John J. Heisler  
2LT James T. Howarth  
WO1 Zackery N. Huffman  
2LT Jared J. Joyce  
SGM Dexter L. Kimble  
CPT Bradley K. Kistler  
2LT Anthony J. Lechanski  
WO1 Matthew D. Linton  
WO1 Spencer A. Luke  
CPT Thomas J. McCarthy Jr.  
2LT Christopher R. McCurnin  
WO1 Robert S. McLeod  
2LT Marc J. Miller  
WO1 Jeremy E. Minton  
2LT Aaron C. Olson  
2LT Brittany J. Pearson  
2LT Daniel L. Petterson  
WO1 James H. Rogers  
WO1 Antonio R. Schlee  
MAJ Juan Carlos Segura

WO1 Stephen R. Tucker  
WO1 Ryan J. Vanderpool  
2LT Jana R. Welch  
2LT Breanna Westman-Evans  
2LT Christopher L. Youhouse

### Badger Chapter

SGT Joshua P. Veldboom

### Bavarian Chapter

CW3 William T. McKenna

### Central Florida Chapter

SPC Kevin J. Mauter  
Gary Schmidt  
Terri Smith

### Colonial Virginia Chapter

SSG Robert E. DeShazo  
MAJ Brant Edward Kananen

### Delaware Valley Chapter

CW2 Luisa Y. Sanchez

### Embry Riddle Eagle Chapter

CW5 Jay Burke

### Flint Hills Chapter

SPC Javier A. Ortiz

### Frontier Army Chapter

MAJ Sherdrick Rankin

### Greater Atlanta Chapter

Sallyl W. Buglass  
MAJ Johnny L. Helms, Ret.  
1LT Travis Holmes  
PFC John Marsteller  
TSgt Gary L. Winter

### Griffin Chapter

CW3 Milam Jeans

### High Desert Chapter

CPT Jason Birkle

### Iron Mike Chapter

CSM William John Yeargan

### Jack H. Dibrell/Alamo Chapter

SSG Glen D. Blevins  
CPT Guillermo Cardona  
CPT Monique Culver  
SGT Jason J. DeLeon  
CW2 DJ Eilers  
SFC Ronald L. Hill  
CW4 Robert L. Martinez  
SGT David Floyd Polinsky  
MAJ Delvern P. Royal  
SFC Garth L. Sloan

### Jimmy Doolittle Chapter

1LT Sean Brookshire

### Keystone Chapter

1LT David William Smith

### Land of Lincoln Chapter

1LT Brian Willey

### MacArthur Chapter

CW4 Neal L. Humphries  
MAJ Kathy D. Humphries  
Mr. Robert Moss

### Magnolia Chapter

1LT Jeremiah R. Malmberg

### Minuteman Chapter

SPC Luis Cortez Jr.  
SPC Brett M. Hurley  
SSG Christy M. Kupiecfox  
SGT Jason L. Scott

### Morning Calm Chapter

1LT Keary Q. Salls

### Mount Rainier Chapter

MAJ Ryan Yedlinsky

### North Country Chapter

MAJ Adam Ryan Bock  
CW3 Edward ONeal Smith

### North Star Chapter

CW2 Corey W. Cassavant  
CW2 Ronald J. Chapman

### North Texas Chapter

SGT Josue A. Ayala  
CW3 Michael D. Crowley  
SPC Jose M. DeJesus  
SPC Gorge T. Devore  
SGT Eric Gartman  
Howard Daniel Horton

### Northwest Chapter

SPC Latory Jackson

### Northwest Chapter

SPC Lurtina M. Jones

### Northwest Chapter

SSG Jeff G. Knoles

### Northwest Chapter

SSG Doald V. Leach

### Northwest Chapter

SSG Rick V. Lynn

### Northwest Chapter

SPC Rysan L. Mendenhall

### Northwest Chapter

SPC Ruby Montoya

### Northwest Chapter

CW2 Randolph S. Robinson

### Northwest Chapter

SPC Stephen P. Sample

### Northwest Chapter

PFC Andrew R. Tollison

### Northwest Chapter

PFC Seth Turrubiarte

### Northwest Chapter

PFC Dashinee S. Womack

### Pikes Peak Chapter

LTC John Wesley Mims, Ret.

### Ragin' Cajun Chapter

CPT Travis Easterling

### Ragin' Cajun Chapter

CW3 Travis M. Haney

### Rio Grande Chapter

1LT John Bockmann

### Rio Grande Chapter

MAJ Nicholas Ryan

### Rising Sun Chapter

Angie D. Hinkle  
Yagi Hiroaki  
COL Makoto Hoshino  
LTC Kzuo Obata  
Takafumi Shibuya  
Mitsuharu Sone

### Savannah Chapter

MAJ Craig A. Blow  
CW4 Jason Dunnam

### Tarheel Chapter

SFC Brian Nelson Avery  
SPC Brian J. Bertram  
SFC Scott Ringenbach

### Tennessee Valley Chapter

Brian Cooper Bouma  
Tracey Hansen Howard  
Shane Lege

Jesse Lesperance  
2LT Eric Q McClure  
Joan Reichwein Smith  
Lesa Valleroy  
SFC Christopher Wolsifer Sr. Ret.

### Volunteer Chapter

CW3 Donnie R. Anderson Jr.  
CW2 Patrick J. Coleman  
SPC Nathan C. Colvin

### Washington-Potomac Chapter

CW5 Michael T. Bartin  
SGT Earle Heusinger III  
MAJ Michael Rigney  
1LT David William Smith

### No Chapter Affiliation

SFC Robert Aldrete  
CW4 Thomas V. Bates  
SPC Rowdy L. Blackmon  
SGT Steven E. Bohanan  
WO1 Darrick Coriz  
MSG Oscar B. Crober  
SSG Stephen Daniels  
CW2 Michel Drake  
SSG Russell J. Ficek  
SPC Brian Gieselman  
SPC Matthew P. Golden  
CPT Stephen Kempf  
CW4 Chris Kurtz  
CPT Matt McCann  
CW2 Jason McDowell  
SPC Derek R. Mercer  
SSG Neil V. Rerucha  
SGT Grant J. Roary  
CW4 Matthew Alan Sheridan  
Olivia Smith  
Kayce E. Smith  
MAJ Kurt Southworth  
SGT Alexis Torres Sr.  
Joan Versey  
SFC Warren T. Whiteford

### Lost Members

Help us locate a member on the lost list and receive a free one month extension to your AAAA membership!  
SGT Stephen Alston  
1LT James R. Antonides  
SGT Austin S. Appelman  
SPC David Aragon  
SSG Chad Badgett  
PFC Richard Barlow  
SPC Callie Barnum  
SPC Jordan Batt  
SFC Becky J. Belsma  
SFC Brian W. Belsma  
SPC David Blackmon  
SPC Anthony Blevins  
SPC Robert Blevins  
SFC Gregory Bolton  
SGT Sarah Brant

CW4 Tom Brautigan  
SFC Kristl Bray  
SPC David Brown  
2LT Jesse R. Brown  
SPC Travis Brown  
Marco Budinich  
SPC Troy Bullard  
SFC Brant Burnham  
CW3 James D. Cain, Ret.  
1SG Jorge R. Cantu  
PFC Shyane D. Canzonori  
SPC Nikolas Carly  
SPC Chad Carson  
SPC Brett Cheney  
SPC Aaron G. Clark  
Martin Coenson  
SPC David Conrad  
SSG Tyler Coombs  
CPT Christopher Corkery  
SSG Jade Cowley  
SPC Thomas Daniels  
SPC Demain D. Delaney  
PFC Courtney Dennis  
SPC Tracee Deubler  
SGT Matthew DiBiase-Dailey  
MSG Donald Dussetschleger  
SPC Francoise Lapira Erni  
1LT Mark A. Evans  
CDT Bruce Vincent Federico  
SGT Glen Ferguson  
SGT Lachelle Fitisemanu  
SPC Cameron P. Fleetwood  
SSG Sunia Fonua  
SSG Carlos S. Garcia  
SSG Nathan D. Garlach  
CW2 Matthew Garrand  
CW4 Daniel Giles  
William H. Gillispie  
PFC Jenna L. Goodspeed  
CPT Matthew Green  
1SG Abdel Farid Guzman  
SPC Steven Hatch  
SGT Stewart Hatch  
SPC Taylor Haycock  
SPC Michael Herdegen  
PFC Shane Higgins  
CW3 Kevin Matthew Hogue  
SSG Ronald Holland  
SPC Jordan Holt  
SPC Johnathon D. House  
SSG Nicholas Hunt  
1SG Joel Hutchings  
CPT Robert Hyatt  
SSG Joshua A. Jessie  
SSG Michael A. Johns  
SPC Chad R. Kemp  
SGT Shannon Knorr  
CW2 Kenneth E. Lett  
SPC Randy A. Little  
SSG James Logan  
SPC Bryan Lopez  
SPC Jesus Lopez

SSG Paul Madsen  
 SGT Aaron Malone  
 2LT Chad Marden  
 SPC David Marler  
 SGT Kenneth McWilliams  
 CPT Stephen W. Miles  
 SGT Tyler Miller  
 SSG Zackery Mitani  
 SPC Jose Moncada  
 SSG Ryan Moser  
 Chanina Murry, Ret.  
 2LT Scott Neilson  
 1LT Richard W. Nicholson  
 CPT Matthew R. Nicol  
 SPC Steven Nielsen  
 SGT Terrance Nielson  
 SPC Joseph Novosel  
 SSG Jose Pantoja  
 SPC Eugene D. Patton  
 SGT Mark Peterson  
 SSG Brett Pierce  
 CW2 Erik Price  
 SPC Thomas Privett  
 SSG Mario Raymundo  
 CW2 Mark C. Reed  
 CDT Trevor T Reed  
 SPC Tarik V. Register  
 SPC Jerett Richens  
 SPC Andrew Riggs  
 CW2 Edwin X. Rivas  
 SPC Melony R. Robinson  
 SPC Todd Rosenlund  
 SPC Brian Rowley  
 SPC Mark Searcy  
 SPC Kyle Simmons  
 SPC Michael G. Simmons II  
 1SG Bryan Smethurst  
 PFC Demetrius R. Smith  
 SPC Kevin Michael Smith  
 SPC Robert Snarr  
 SPC Trient Spires  
 SGT Joshua R. Steadman  
 COL William W. Stevenson, Ret.  
 PFC William R. Stoneham  
 SGT Alexander Stoor  
 PFC Steven Tamayo  
 SGT Travis Taylor  
 SGT Edward M. Thorne  
 1LT Terry Thornton  
 SGT James Turner  
 SGT Edin Vajovic  
 CW2 Joseph Vandrimmelen  
 SGT John M. Vasquez  
 SSG Douglas Ware  
 James L. Watson  
 SGT Carrie Weatherspoon  
 MAJ Lance Webb  
 Hans Weichsel  
 SPC Nathan Wilcox  
 SFC Dallas Wilkerson  
 CW2 William Woodward  
 SPC Alma Worthington

## AAAA Chapter News

### Bavarian Chapter

PHOTO BY SPC JEANITA C. PISACHUBBE, 1AD CAB PUBLIC AFFAIRS



The Bavarian Chapter recently made a \$2,500 donation to the Landstuhl Fisher House after raising the money during its annual Valentine's Day rose sale on Feb. 14, 2013 outside the PX at Hohenfels, Germany. Chapter members joined president, LTC John Knightstep (4th right from flag pole), in front of the Landstuhl Fisher House to present the check to Fisher House representative, Mrs. Doria Rey (2nd right from flag pole).

### Minuteman Chapter

CHAPTER COURTESY PHOTO



The Minuteman Chapter hosted the 7th Annual CW3 Terry Knight Memorial AAAA Golf Tournament on Sep. 23, 2013 at East Mountain Country Club in Westfield, MA. All proceeds went to the chapter scholarship fund. The winners of the tournament were (left to right): William Hurley; his son, Jason Hurley, Doug Lambert, and William's other son, Brett Hurley who is a specialist in the Massachusetts Army National Guard.

### North Texas Chapter

CHAPTER PHOTO BY CLARE MCCARREY



Seven foot tall Elvis meets the North Texas Chapter longhorn, T-Bone, with Bonnie Reininger, wife of chapter VP Awards, LTC (Ret.) Terry Reininger, at the 2013 AAAA Annual Professional Forum and Exposition in Fort Worth, TX. She is an avid volunteer for the chapter and was instrumental in helping the AAAA North Texas

Chapter Board during the event, taking pictures of attendees with T-Bone and then emailing them out following the event.

### Oregon Trail Chapter



On Sep. 6, 2013, the Oregon Trail Chapter of the Army Aviation Association of America hosted the first ever (but soon to be annual) all ranks golf outing at Meadowlawn Golf Course, Salem, OR and it was a smashing success! Forty players participated in the scramble which was a "no cost" event for junior enlisted team members thanks to a generous donation from AAAA National as we work to get our chapter up and running again. Seven new members signed up to join the chapter and, during the quarterly AAAA meeting which followed the event, 27 current members (our largest turnout ever!), along with the new pledges, began planning two future events – a "Texas Hold'em" tournament for the winter quarterly meeting, and a second annual golf tournament to be held in conjunction with the Oregon National Guard Association's Officers Convention in Bend, Oregon in late April. Also special thanks go to Team Traeger, who donated a highly coveted Traeger "Lil-Tex" Barbeque, to be used as Texas Hold'em tourney's grand prize during our next event!

### AAAA Supports Army Aviation Museum Fundraiser



AAAA National President, BG (Ret.) Howard W. Yellen (second left) and his teammates, (left to right) SSG Shawn H. Thurman, 1st Bn., 14 Avn. Regt.; Yellen; SFC Bryan E. Clancy, NCO Academy; and SPC Frank D. Rovito, Jr., 1st Bn., 11th Avn. Regt. pause for the Kodak moment with Army Aviation Museum Foundation Chairman, LTG (Ret.) Dan Petrosky, at the Silver Wings Golf Course, Fort Rucker, AL on Sep. 20, 2013. AAAA sponsored a foursome and a hole for the Army Aviation Museum Annual Golf Tournament fundraiser.

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

### Colonial Virginia Chapter

CHAPTER PHOTO BY WILLIAM D. SWARTZ



**COL Dean D. Heitkamp**, commander of the 128th Avn. Bde., is inducted into the Silver Honorable Order of St. Michael by Colonial Virginia Chapter president, LTC (Ret.) Mark S. Jones, at Joint Base Langley-Eustis, VA on July 16, 2013 in conjunction with his change of command. Heitkamp was recognized for his outstanding service to Army Aviation in activating the 128th Avn. Bde. and leading the transition from the U.S. Army Aviation Logistics School to the new brigade structure. He moves to Fort Bragg, NC and his next assignment as deputy commander of the U.S. Special Operations Aviation Command.

CHAPTER PHOTOS BY CW2 JAMES LAWRENCE



Colonial Virginia Chapter president, LTC (Ret.) Mark S. Jones, inducts **CW2 Alexander Gonzalez**, executive officer, Co. B., 1st Bn., 222nd Avn. Regt. (above photo) and **SFC Brandon Fank**, senior platoon sergeant in B/1-222nd Avn., (below photo) into the Bronze Honorable Order of St. Michael at a ceremony



at Joint Base Langley-Eustis (JBLE), VA on Aug. 9, 2013. Both were recognized on the occasion of their change of duty for outstanding leadership and performance in their current duties. They will remain at JBLE where Gonzalez will become an instructor at the Warrant Officer Basic Course and Fank will assume the responsibilities of senior platoon sergeant.

CHAPTER PHOTO BY SSG (RET) WILLIAM SWARTZ



**SGM Eric Goolsby**, a department chief at the 128th Avn. Bde., is inducted into the Bronze Honorable Order of St. Michael by 128th Avn. Bde. commander, COL Dean Heitkamp (left), and Colonial Virginia Chapter president, LTC (Ret.) Mark S. Jones (right), during a ceremony on Jul. 10, 2013, at Joint Base Langley-Eustis (JBLE), VA. Goolsby was recognized on the occasion of his retirement for the culmination of a highly successful 24 year military career while serving in positions of responsibility within the United States Army Aviation Logistics School and 128th Avn Bde. He will be a performance coach for Newport News Shipbuilding in Newport News, VA.

### Flying Tigers Chapter

CHAPTER PHOTO BY RENEE BRIDGES



BG Peter Quinn (left), deputy commanding general of the 84th Training Command and former commander of the 11th Aviation Command (U.S. Army Reserve), inducted **COL Michael G. Schellinger**, deputy commander of the 11th Avn. Cmd., into the Silver Honorable Order of St. Michael during his retirement ceremony on Jul. 12, 2013 at Hangar One on Godman Army Airfield, Fort Knox, KY. Schellinger's wife, **Dr. Megan Schellinger**, was inducted at the same ceremony into the Honorable Order of our Lady of Loreto while their children, Margo and Sheamus, looked on. Schellinger will continue flying for Delta Airlines following his retirement.

### North Texas Chapter

U.S. ARMY NATIONAL GUARD PHOTO BY LAURAL LOPEZ



COL Travis Richards, 36th Combat Aviation Brigade Commander-Rear, Texas Army National Guard, inducts **CW5 Joong H. 'Chuck' Kim**, State Aviation Maintenance and Material Officer, Texas Army National Guard, into the Silver Honorable Order of St. Michael during his retirement ceremony at Camp Mabry in Austin, TX, July 25, 2013. Kim served more than 42 years in the U.S. Army with 28 of those years in the Texas Army National Guard and is a Master Army Aviator with over 8,000 flight hours in various types of military helicopters.

### Rio Grande Chapter

U.S. ARMY PHOTO BY SPC JEANITA C. PISACHUBEE



**LTC Josephine Thompson**, outgoing commander of Co. C (MEDEVAC), 2nd Bn., 501st Avn. Regt., is inducted into the Bronze Honorable Order of St. Michael, by 1st Armored Division Combat Aviation Brigade commander, COL Carey M. Wagen, during a Sep. 20, 2013 ceremony at CAB headquarters on Fort Bliss, TX. Thompson was recognized for her more than 14 years of exceptional performance in MEDEVAC positions on the occasion of her change of duty. Thompson moves to Joint Base Lewis-McChord where she will serve as the chief of operations for the Western Regional Medical Command's Readiness Division.

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# AAAA: Supporting the U.S. Army Aviation Soldier and Family



COL Lonnie G. Hibbard, then commander of the Cbt. Avn. Bde., 1st Armored Div., inducts MAJ Paul B. Eberhardt, brigade operations officer, into the Bronze Honorable Order of St. Michael during a Jul. 17, 2013 ceremony at the CAB headquarters, Fort Bliss, TX. Eberhardt was recognized on the occasion of his impending change of station to Schofield Barracks, HI, for his successful taking of the unit from BRAC move, through the personnel and equipment reset, while simultaneously planning and preparing for inspections, five CTEs and deployment.



SFC Conception Garza, 1SG of Co. C, 2nd Bn., 501st Avn. Regt., is inducted into the Bronze Honorable Order of St. Michael by 1st Armored Div. Cbt. Avn. Bde. commander, COL Carey M. Wagen, during a Sep. 20, 2013 ceremony at the CAB headquarters in Fort Bliss, TX. Garza was recognized for his more than 16 years of exceptional MEDEVAC service in all noncommissioned officer leadership positions he has held. His next assignment is as the operations sergeant at William Beaumont Army Medical Center, El Paso, TX.

ceremony. His wife, **Tracy Dwyer**, (right below) was inducted into the Honorable Order of Our Lady of Loreto during the retirement ceremony for her dedicated support to Army Aviation.



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MAJ Joseph C. James, adjutant for the Cbt. Avn. Bde., 1st Armored Div., is inducted as a Knight of the Honorable Order of St. Michael, by then-brigade commander, COL Lonnie G. Hibbard during a ceremony on Jul. 17, 2013, at the CAB headquarters in Fort Bliss, TX. James was recognized for ramping up the S1 functions from 250 Soldiers to a full CAB of 2577 Soldiers in 120 days – setting the standard for the division in several personnel areas. He remains at Fort Bliss for his next assignment with the 1st Armored Div. G-1.



LTC Gerald Dwyer (right) was inducted into the Bronze Honorable Order of St. Michael, by COL Thomas Todd (left), Project Manager for Utility Helicopters and vice president of the AAAA Tennessee Valley Chapter, during Dwyer's retirement ceremony July 25 at Redstone Arsenal, AL. Dwyer culminates 26 years of military service, last serving as the Special Projects lead and head of divestiture planning for the UH-60A Black Hawk. He was also recognized with the Legion of Merit during the



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## In Memoriam



FAMILY PHOTO

### Colonel William Edward Crouch Jr., Retired

COL (Ret.) William E. "Bill" Crouch Jr., passed away on

Sep. 19, 2013 in Panama City, FL. He was 83.

Graduating from the U.S. Military Academy at West Point with a commission in the field artillery in 1951, he attended flight school in 1960 and served 3 years with the U.S. Army Aviation Test Board. He served 4 tours in Vietnam to include command of the 9th Avn. Bn., 9th Inf. Div.; Executive Officer, 17th Avn. Gp., and command of the 101st Avn. Gp., 101st Airborne Division (Airmobile).

Following attendance at the U.S. Naval Test Pilot School, he was assigned to the U.S. Army Aviation Test Activity at Edwards Air Force Base, CA, where he served as an experimental test pilot, Chief of Flight Test Engineering, and later deputy commander. He served in the Pentagon as Chief of the Airmobility Division (later reorganized as the Aviation Systems Division) in the Office of the Deputy Chief of Staff for Research, Development, and Acquisition until July 1977.

He concluded his military career in 1981 as commander of U.S. Army Aviation Development Test Activity in Fort Rucker, AL and continued to work with Army Aviation as a member of industry until his retirement in 1993.

His awards included the Legion of Merit with three Oak Leaf Clusters (OLC), the Distinguished Flying Cross with OLC, the Bronze Star Medal with "V" device for Valor and three OLCs, 32 awards of the Air Medal, and the Army Commendation Medal with "V" and OLC.

After retirement, he moved to Panama City Beach, FL and began service with the U.S. Coast Guard Auxiliary, eventually achieving the rank of Commodore. A life member of AAAA, he was a former National

Vice President, and president of the Washington-Potomac Chapter .

A memorial service was held, Sep. 28 in Panama City and his remains will be interred with full military honors at Arlington National Cemetery at a later date.



FAMILY PHOTO

### Lieutenant Colonel Norman George Laumeyer, Retired

AAAA Charter Member, LTC (Ret.) Norman G.

Laumeyer, 84, of Enterprise, AL, passed away on Aug. 7, 2013 at Medical Center Enterprise.

He enlisted in the Minnesota National Guard in 1946, in the Air Force in 1947, and in the Army in 1951 to attend Infantry Officer Candidate School. Following graduation and commissioning, he completed airborne and Ranger school and graduated from flight school in 1955, serving two combat tours in Vietnam in the 1960's.

While serving the military, he earned many awards including the Bronze Star, Meritorious Service Medal, and 16 Air Medals. A Master Army Aviator with more than 3,400 hours, he retired in 1970 with 23 years of service.

Following his military retirement, he worked as a Department of the Army training specialist from 1972 until 1994 at Fort Rucker, AL where he earned a Superior Civilian Service Award. He lived in Daleville for 40 years where he was president of the Daleville School Board.

He was a charter member of AAAA having joined in 1957 and was president of the Fort Rucker chapter of AUSA in 1992.

A funeral mass was conducted on Aug. 13 at St. John Catholic Church in Enterprise, AL and he was buried with full military honors immediately following in Meadowlawn Cemetery.



U.S. ARMY FILE PHOTO

### Brigadier General Leo Eugene Soucek, Retired

BG (Ret.) Leo E. Soucek passed away on Apr. 2, at Walter

Reed National Military Medical Center after a long fight with chronic obstructive pulmonary disease. He was 84.

A Virginia Military Institute graduate, he served as a combat engineer during the Korean War prior to attending flight school. He was literally the first man to report to the 227th Assault Helicopter Battalion, the Army's first air-assault battalion of its first air assault division, the 11th Air Assault Division (Test), and, as the XO, helped build the unit from the ground up.

The 11th was later re-flagged as the 1st Cavalry Division, the Army's first Airmobile Division, at Fort Benning, GA in 1965. Soucek flew more than 6,000 hours, to include 3,000 combat hours in Vietnam where he commanded the 11th Cbt. Avn. Bn., the 11th Cbt. Avn. Gp., and the 164th Avn. Gp.

His final aviation assignment was as the commanding general of the U.S. Army Primary Helicopter Center and School at Fort Wolters, TX. He retired from the Army in 1974 after having served as commander of the Army section of the military assistance advisory group in Tehran, Iran.

His awards included the Silver Star, Distinguished Service Medal, four awards of the Legion of Merit, six awards of the Distinguished Flying Cross, two Bronze Star Medals, 85 awards of the Air Medal, and a Purple Heart.

He subsequently served in a civilian capacity in Iran as Middle East director of operations for Martin Marietta, settling in Potomac, MD in 1980 and working as a consultant for Martin Marietta and later for Lockheed Martin before retiring in 1996.

A life member of AAAA, he was buried with full military honors at Arlington National Cemetery Sep. 10, 2013.

# AAAA: Supporting the U.S. Army Aviation Soldier and Family

Remember the AAAA Scholarship Fund in your end-of-year donations. 100% of your donation goes to our soldiers and families!



## Thank You!

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AAAA recognizes the generosity of the following individuals, chapters and organizations that have donated to the Scholarship Foundation General Fund since the beginning of the year. The General Fund provides funding to enable the chapter, corporate, heritage and individual matching fund programs as well as national grants and loans. 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! 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.



APR PHOTOS BY RENEE BUIZ

AAAA Scholarship Foundation, Inc., president, Connie Hansen, and Foundation fundraising chair, COL (Ret.) Lou Bonham, accept donations for the General Fund during a reception prior to the AAAASF 50th Anniversary Banquet on Sat., Apr. 13, 2013, at the Fort Worth Convention Center, Ft. Worth, TX from: (left photo) BG (Ret.) Steve Mundt (left), vice president for business development at EADS North America and Marc Paganini, president and CEO of American Eurocopter; and (right photo) LTG (Ret.) Dan Petrosky, then-national president of AAAA.

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 MAJ Ryan Boyle  
 SFC Jeremy West  
 SFC James Byrd  
 Tommy W. Filler  
 SSG Robert L. Smith  
 John (Jack) Harry  
 1SG Jimmey L. Mygatt  
 Alexander Tejada  
 CW4 Rolando Sanchez  
 Dennis A. Kandel  
 SFC Kelvin A. Coley  
 MSG Harold T. Sullivan Jr.  
 SFC Jeffrey P. Bailey  
 1SG Craig Petronella  
 SFC Andrew Lamarre  
 SFC Lis Waldemar  
 SGM Eric Goolsby  
 1SG Victor Colon  
 1SG Gilberto LopezRuiz  
 1SG Jon D. Frerichs  
 CW4 Robert M. Wagner  
 CW2 Alexander Gonzalez  
 SFC Brandon Fank  
 CW4 James E. Morrow III  
 SGM Crystal L. Turner  
 CW4 Michael T. Bollen  
 CW3 Scott H. Durrer  
 CW4 Alvaro Flores  
 CW3 Joe N. Hudson III  
 CSM Steven D. Odom  
 CW4 David P. Peveto  
 CW5 Angel L. Reyes Jr.  
 CW5 Christopher C. Good  
 LTC Bruce C. Balzano  
 SFC Concepcion Garza  
 CW3 Victor Gallegos  
 MSG Oscar Esquibel  
 SFC Greg Holmes  
 MAJ Paul M. Wuensch

1SG Jason Crowley  
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 CPT Clinton R. Woody

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 Lisa M. Mannion  
 Cindy DeAnda

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 CW5 John Blank  
 Secretary,  
 MAJ Chris Chung  
 Treasurer,  
 MAJ Connie Lane  
 VP Programs,  
 CW4 Terry Horner  
 VP Scholarship,  
 MAJ Robert Spara

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 CW4 Ray Freeman  
 VP Social Events,  
 CW4 Brian Ferrell  
 VP Scholarships,  
 CW4 Sean Hogan  
 VP Fundraising,  
 CPT Brian Cooper  
 VP Awards,  
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 Senior Vice President,  
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## Oregon Trail Chapter

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 CW4 Paul Zenchenko  
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 MAJ Rob Hagerman, Ret.

## NCO of the Month

SGT Jason L. Scott  
 August 2013  
*Minuteman Chapter*

## NCO of the Quarter

SGT Joshua P. Veldboom  
 4th Quarter  
*Badger Chapter*

## Soldier of the Month

SPC Rowdy L. Blackmon  
 August 2013  
*Thunderbird Chapter*

## Distinguished Instructor

SSG Keith R. Butterbredt

## ACES

LTC Robert R. Keeter  
*Aviation Center Chapter*

CW5 Dale A. Yoder  
*Keystone Chapter*

## New Lifetime Members

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 MAJ Bryan K. Cohoon  
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Daniel J. Rubery  
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## UPCOMING EVENTS

### January 2014

- Jan. 8-10 AUSA Aviation Symposium & Exhibition, National Harbor, MD
- Jan. 10 AAAA SFI Executive Committee (Conference Call) Meeting, Arlington VA
- Jan. 11 AAAA National Awards Committee Selection Meeting, Arlington, VA
- Jan. 27-29 Aviation Senior Leaders Conference, Fort Rucker, AL

### February 2014

- Feb. 12-13 Joseph P. Cribbins Aviation Product Symposium, Huntsville, AL
- Feb. 26-28 AUSA Winter Symposium, Huntsville, AL

### March

- 1-4 HAI Heli-Expo, Anaheim, CA

### May

- 1 AAAASFI deadline for receipt of all completed scholarship applications
- 4-6 2014 Army Aviation: Mission Solutions Summit, Nashville, TN

## ARMY AVIATION UPCOMING SPECIAL FOCUS



### NOVEMBER

- Unmanned Aircraft Systems
- Air Traffic Services



### DECEMBER

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

Contact: **Bob Lachowski**  
Advertising Director  
Tel: (203) 268-2450 x 131  
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# 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.

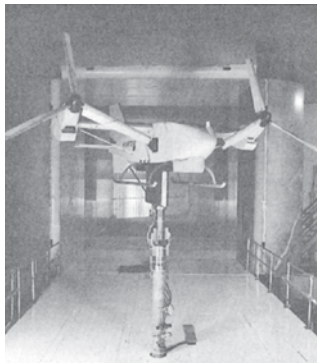


## 25 Years Ago October, 1988

### Bell-Boeing Pointer UAV

The world's first tilt-rotor unmanned air vehicle (UAV) has begun wind-tunnel tests in Philadelphia. The Pointer meets DoD short-range

requirements (150-300 km range). First flight is expected later this year at the Bell facilities in Texas.



### Underwater Egress Training

CW2 James Jarvis and SGT Mark Smith, G Company, 123rd Aviation, Ft. Richardson, AK, have come up with a device that will enhance the survival of aviators when landing in the water. The Underwater Egress Training device or "Dunker," is a low-



technology attempt to improve unit training. And, in lieu of sending Army personnel to Navy facilities in California or Florida, the Army can take advantage of the Jarvis-Smith device at noticeably less cost. The simplicity of the Dunker enables units to train aviators year round, even at a home station's swimming pool. For more information on this intriguing device, refer to page 38, Army Aviation, October 31, 1988 issue.

### Chapter News: Aviation Center Chapter, Ft. Rucker, AL

General Membership Meeting, August 25, 1988. Guest speaker was retired Navy CPT John W. Thornton, prisoner-of-war, Korean conflict. CPT Thornton, who authored *Believed to Be Alive* in 1980, related stories of courage, humor and commitment that helped him to cope with his confinement. CPT Thornton is reputed to be the first helicopter pilot to be shot down during the Korean War. The naval officer endured two-and-a-half years of Communist captivity.



## 50 Years Ago October 1963

### Six Speed Records Set

A U.S. Army OH-23G, piloted by CPT Bertram G. Leach, shattered two previous helicopter world speed records and established four new ones.

CPT Leach piloted the light observation helicopter over three straight and three closed circuit courses near Edwards AFB, Calif. Certification of the new records is pending with the Federation Aeronautique Internationale. CPT Leach is a veteran Vietnam combat support helicopter pilot. He is now assigned to Ft. Rucker as a Logistical Evaluation Project Officer. For a breakdown of CPT Leach's record-setting flights, see "Army OH-23G Sets 6 World Speed Records," page 12, Army Aviation, October-November 1963.



### Largest Delivery

Thirty-nine helicopters were delivered to the Army on 29 October, the delivery being made at a program noting the change in Bell plant cognizance to the Army. At the same time, Bell



announced the receipt of a \$108,320,407 Army contract for additional Iroquois aircraft.

### In Vietnam

GEN Maxwell D. Taylor, Chairman of the Joint Chiefs of Staff, talks with PFC Andrew J. Downin, crew chief of a 119th Aviation Company Iroquois. GEN Taylor was preparing to takeoff for a tour of the II Corps area in South Vietnam. GEN Taylor, together with Secretary of Defense Robert McNamara, relied on Army airlift for most of their Vietnam tour.





*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, AL, where the portraits of the inductees and the citations recording their achievements are retained for posterity. Each month Army Aviation Magazine highlights a member of the Hall of Fame.*

*Nominations for the 2015 induction into the Hall of Fame are currently being accepted, with a deadline date of June 1, 2014.*

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

**LIEUTENANT GENERAL WILLIAM H. FORSTER, RETIRED**  
**ARMY AVIATION HALL OF FAME 2010 INDUCTION - FORT WORTH, TX**

LTG William H. “Bud” Forster made countless outstanding contributions to Army aviation over his 30 year career.

He applied a hi-tech Ph.D. degree and command leadership experiences in Europe, in two Viet Nam tours (173rd Assault Helicopter Company) and in CONUS (10th Combat Aviation Battalion) to drive aircraft combat and logistics systems innovations across the entire aviation fleet.

Fifteen years after his retirement from the Army, his technical contributions remain a part of every major Army helicopter in service.

Dual-rated, an experimental test pilot, and program manager (PM) for both the Kiowa and Apache programs, he pioneered the integration of high capability electro-optic and radar systems on Army aircraft. He was the first officer selected by the Army for astronaut training and the first Aviation Program Executive Officer.

In 1992, he became the first U.S. military officer elected to the Russian Academy of Natural Science. A rare professional, he was the “Renaissance man” of Army aviation from the 1970’s to the 1990’s.

His combat, military service and civilian recognitions, medals and awards include two Distinguished Service Medals, two Legions of Merit, two Bronze Stars, the Distinguished Flying Cross, 17 Air Medals, two Meritorious Service Medals, the Army Commendation Medal, the Senior Army Aviator Badge, the Senior Space Operations Badge, the Army Aviation Association of America Order of St. Michael (Gold Award) and the NASA Award for Outstanding Service.

After retiring in 1995, he continued to excel in private industry, receiving the American Helicopter Society (AHS) Special Award for Lifetime Achievement in advancing vertical flight technology.

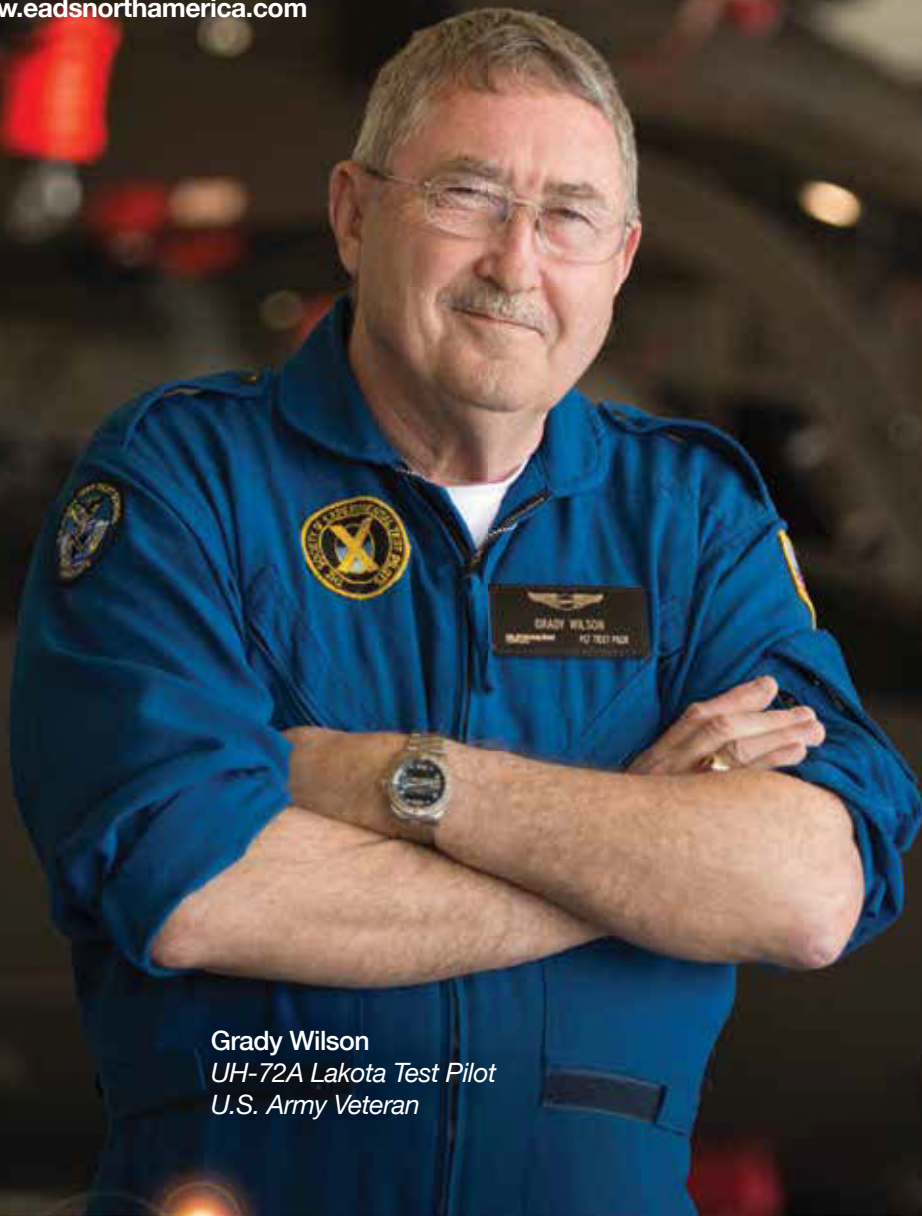
He also chaired the Board on Army Science and Technology and serves on the Army Science Board.



# New Uniform, Same Commitment

From serving his country in the skies over Vietnam to testing helicopters for the Army today, Grady brings the same high level of commitment to his job and to our nation. Currently, he serves at our manufacturing facility in Columbus, Mississippi, where more than 50 percent of our employees are veterans. They're proud to have delivered more than 270 UH-72A Lakota helicopters to date – all on time and on budget – and they're ready to bring that same dedication to building the Army's next Armed Aerial Scout. The uniforms may change, but the commitment stays the same.

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**ON THE COVER**

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**Thurman Changes Command in Korea**



U.S. Defense Secretary Chuck Hagel presents U.S. Army **GEN James D. Thurman**, outgoing commanding general of United Nations Command, R.O.K.-U.S. Combined Forces Command, and U.S. Forces Korea, with the Distinguished Service Medal as Thurman's wife, Dee Thurman, looks on during a change-of-command ceremony in Seoul, South Korea, Oct. 2, 2013. Dee Thurman was also presented the Joint Distinguished Public Service Award. During his 38 years in uniform, Hagel said, Thurman, the Army's most senior active aviator, distinguished himself as a warrior and as a leader in Desert Storm, Kosovo, and during two deployments to Iraq – including command of the 4th Infantry Division. Hagel said Thurman's leadership has made the alliance stronger than it has ever been. "You have made a profound difference in the world," he said. "Your soldiers, their families, and your country will always be grateful for what you and Dee have done for them." GEN Curtis M. Scaparrotti, who led the International Security Assistance Force's Joint Command in Iraq and Afghanistan, and most recently served as director of the Joint Staff, takes over the command. Thurman plans to retire to Texas in November.

**Beyard Tapped for MDARNG Top NCO**



**CSM Thomas B. Beyard** has assumed the responsibilities of Command Sergeant Major of the Maryland Army National Guard. He comes to the job from his current position as CSM of the 29th Combat Aviation Brigade, based at Aberdeen Proving Ground, Edgewood Area, MD., a job he has held since 2008. His military career spans over 31 years of service, almost all in Army Aviation. Beyard

has deployed twice to the Middle East – in 2006 as CSM of Task Force AVCRAD 06-08 (Aviation Classification Repair Activity Depot); and 2011 as CSM of Task Force Normandy (29th CAB). As a civilian, Beyard is employed as the director of Housing and Preservation Services and Code for the city of Westminster, MD. He holds a Bachelor of Science degree from Towson University and a Masters of Business Administration degree from Trident University International. Beyard replaced CSM Leroy Hill who retired at the end of September after nearly 30 years of service.

**CCAD & D/3-82nd Avn Tapped for DoD Maintenance Awards**

The Department of Defense (DoD) announced on Sep. 27 the 2013 winners of the Secretary of Defense Maintenance Awards for depot and field-level units. These awards are presented annually to recognize outstanding achievements in weapon system and military equipment maintenance. The 2013 Robert T. Mason Depot Maintenance Excellence Award recipient is the Army, UH-60 Black Hawk Recapitalization Program at Corpus Christi Army Depot, Corpus Christi, TX. The program converts and extends the life of the UH-60A aircraft, through equipment overhauls, structural upgrades, and technology and system enhancements to the more advanced UH-60L, giving each recapped UH-60 an additional ten years of service. During 2013, the program completed a record high total of 50 recapped aircraft, while achieving lowered recap costs and shortened turnaround times by 17 percent. A total of six field-level awards are presented in three categories – large, medium, and small. The recipient of one of this year's Secretary of Defense Field-level Maintenance Awards in the medium category is Co. D, 3rd Bn., 82nd Avn. Regt. (Task Force Talon), 82nd Abn. Div., Ft. Bragg, NC. The awards will be presented to the winners at the Secretary of Defense Maintenance Awards Ceremony scheduled for Oct. 30 in the Pentagon Auditorium.

**Corrections:**

In the Aug/Sep issue: on page 78 an incorrect photo was shown for the 3rd Bn., 1st Avn. Regt. commander; and on page 95, an incorrect photo was shown for the 28th Cbt. Avn. Bde. commander. We regret the errors and the correct photos are in the online version which will be available to members only in November.



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# Cleared For The Option

**O**ur National Executive Board team has really jelled in the last few months. Committee Chairs have worked on charters for each committee, new members have joined our committees, and several initiatives are underway ranging from a thorough review and analysis of our by-laws to detailed documentation of our Hall of Fame procedures and process in order to achieve total transparency.

Outreach continues to be a top priority. With 70 chapters around the globe it's important to provide the same timely support to each and every chapter regardless of size or location.

Our VP of Membership, CW5 (Ret.) Dave Cooper and VP for Chapter Affairs, LTC (Ret.) Jan Drabczuk have personally reached out to contact our chapters to see how we can better support them.

The National Executive Group is contacting their new counterparts whenever there is a change of chapter leadership. These lines of communication are invaluable as it allows us to share important information on topics like financial support available from the National Office, free Soldier/NCO of the Month membership programs, scholarship facts, and our wide ranging awards program, to name just a few.

Our National Office stands ready to provide responsive and reliable support whenever contacted. Give us a call - we will get back to you quickly.

I also want to bring you up to speed on the AAAA Annual Meeting, May 4-6, 2014, in Nashville, TN. We just held our first IPR on site and have developed some new directions for the event. We are decoupling the professional piece from the AAAA social events and annual membership meeting. Now we will have a professional agenda and an association membership meeting agenda.

The professional program will be the "Army Aviation Mission Solutions



Attendees participate in a question and answer session with MG William T. "Tim" Crosby, Army Program Executive Officer for Aviation (standing on stage), and his eight project managers, during the 2013 AAAA Annual Professional Forum & Exposition, Apr. 12th, in Fort Worth, TX.

Summit," sponsored by the AAAA. We are trimming it from the traditional 3.5 days to 2.5 days and provide three levels of information exchange.

Top level briefings will occur for two hours a day in the large general session room. Mid level Q&A sessions will occur like last year in the very successful large center Army Aviation Community display in the Technology Learning Center, (TLC).

Deep Dive discussions led by subject matter facilitators will take place on general mission areas like maneuver, engagement, intelligence, and sustainment, in rooms we are building in the adjacent exhibit hall to the TLC.

The AAAA membership meeting agenda will also see some changes. The closing banquet on Tuesday night will NO LONGER be formal attire.

We will have a brief annual membership meeting report, followed by dinner and then go right into our A-List entertainment.

The Hall of Fame Induction Dinner WILL BE formal as this is our most significant recognition event of the program and will accord the appropriate honor due our new inductees and

reflect the prestige of the Army Aviation Hall of Fame.

All this will be reflected in our digital registration process which opens on Monday, January 13, 2014. You will also see more information in the December 31st issue of the magazine and via email shortly before we open registration.

A final comment pertaining to awards – our January 1, 2014 deadline to submit nominations for AAAA National awards (i.e., Unit, NCO, Crew Chief, Aviator of the Year, etc.) is fast approaching. We have many highly deserving units and personnel worthy of nomination. Please take the time to make that submission so they have the opportunity to compete.

Join me in establishing the goal of at least one award submission from every Chapter and let's ensure we continue to recognize excellence within our Branch.

Above the Best!



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



## EMARSS, ON APPROACH.

The Enhanced Medium Altitude Airborne Reconnaissance and Surveillance System (EMARSS) provides the U.S. Army flexible and modular multi-intelligence capability to detect and track surface targets with unprecedented accuracy. The prototype has already achieved first flight and continues its flight testing—part of a total commitment to assure the Army of enduring capability and a best-value solution.





## TRUST

By MG Kevin W. Mangum



A UH-60L Black Hawk helicopter crewed by members of 3rd Battalion (General Support), 10th Combat Aviation Brigade, Task Force Phoenix, makes its way through a mountain pass while conducting a personnel movement mission, Sept. 10, in Khowst province, Afghanistan.

U.S. ARMY PHOTO BY CPT PETER SNEDEBERG, 10TH CAB

**A** rmy Aviation's success as a Branch and as an indispensable capability is built upon a firm foundation of trust. Trust is not only the bedrock of our Army profession, it is the glue that binds us to the Nation and its citizens we are charged to defend.

It is the heart of our branch's reputation as an indispensable capability for our Nation and Army. As, arguably, the only aviation force relentlessly focused on and dedicated to honoring a sacred trust with commanders and Soldiers on the ground, we earn it daily.

We can't rest on our laurels; we must continue to earn that trust with each and every mission. As we build on that critical foundation, day by day, we also need to focus on those attributes that make us indispensable to our teammates on the ground.

While not all encompassing, five attributes portray what we bring to the fight (using the acronym TRUST):

### **T**actically mobile, agile and lethal to achieve overmatch

The capabilities we have developed over the years, mastered and employed by competent and committed Aviation Soldiers, provide our commanders an unparalleled ability to provide time, space, reconnaissance, surveillance, security and the ability to decisively mass combat power while conducting distributed operations across a broad front.

Whether supporting offensive, defensive or stability operations, we deliver an asymmetric advantage in the fight.

### **R**apid and responsive to meet ANY mission

We employ a broad range of complementary, tailorable and scalable capabilities to support and enable unified land operations. We are not only

a maneuver force, but so much more.

Our standards-based culture and disciplined, yet agile, approach to business, allows us to quickly meet any mission and respond to changing requirements. All enabled by world class maintainers.

### **U**nconstrained by terrain: extend operational reach and tempo

We provide commanders the ability to strike or employ ground forces throughout the depth and breadth of their operating environment to seize, retain and exploit initiative.

We provide the "air" in air-ground operations that defines the unique and unmatched way the U.S. Army fights.

### **S**ynergizes all warfighting functions

Army Aviation contributes to and enhances all warfighting functions: rapid movement and maneuver in con-

cert with organic and supporting fires; intelligence from reconnaissance and increased fusion gained by operating across multiple ground force boundaries; enhanced mission command extending lines of communication and enabling battlefield circulation; protect forces and secure routes necessary for success in both combined arms maneuver and wide area security; and, provide the most flexible and responsive sustainment options in a distributed environment.

### **Tied by culture, task and purpose to the ground force**

Our task and purpose is to support and serve the ground force commander. We wear the same uniform, endure the same training and enjoy the same culture. We are American Soldiers, proud Army Aviation Soldiers.

As we look to the future, in an uncertain world with complex, hybrid threats and certain fiscal challenges, we must do all we can to maintain this precious trust, hard earned over years of toil in the fight.

We must continue to focus on the training necessary, in both the operational and institutional force, to enable air-ground operations so leaders are competent and confident in their ability to leverage all elements of combat power at the decisive point and time.

We must refine our doctrine to codify tactics, techniques and procedures, developed and mastered in the crucible of combat, and tailor those tried and true concepts to the current operating environment while leveraging advances in technology and capability.

Our formations must be more modular, agile and expeditionary allowing us to deploy and employ tailorable battalion task forces and company teams.

The entire Aviation Enterprise is committed to ensuring Army Aviation continues to be the standard against which others are compared and is wrestling these challenges and many more, every day.

We are all working to ensure our aviation force remains the very best – best equipped, best trained, best orga-

nized, best resourced – in the midst of declining resources.

We can do nothing less for the great men and women we put into harm's way and for those who trust we will be there when they need us. Despite force reductions announced in June, our Army's senior leaders chose to preserve our aviation capability.

As we move forward, we will have the opportunity to pay our fair share, and we will size and organize our aviation force to best meet our Army's needs. That force, thanks to our great Aviation Soldiers, will continue to be the best and will honor the trust we all hold sacred.

Thanks for being and supporting the best! Army Aviation will be an indispensable capability for years to come!

Above the Best!

*MG Kevin W. Mangum is the Army Aviation branch chief and commander of the U.S. Army Aviation Center of*

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# Achieving Spectrum Dominance in the Combat Aviation Brigade

By CW4 Brian S. Filibeck and CW4 Corey M. Swetz

*CW4 Brian Filibeck the Proponent Manager of the Electronic Warfare Branch and CW4 Corey Swetz, the Senior Instructor for Electronic Warfare at Fort Sill introduce the capability of the Electronic Warfare Technician (290A) for combat aviation brigades.*

*This relatively new career field was approved in 2009 and was designed to provide commanders and their staffs with the effects that electromagnetic spectrum can have on operations and how electronic warfare can be used to gain the tactical advantage.*

*With our advanced aircraft reliant on global positioning satellites for precise navigation and munitions delivery, having expert EW support resident in Aviation formations will be critical for future operations.*



*Above The Best!*  
CW5 Reese

Over the last few years, commanders have received Army electronic warfare (EW) professionals into their ranks without a full understanding of how they can contribute to unit mission. In 2013, combat aviation brigades (CAB) will see an influx of EW Technicians (MOS 290A).

It is imperative CAB leadership understand the utilization and expertise of these professionals to enhance the effectiveness of future operations.

Up to this point, CABs relied heavily on the Aviation Mission Survivability Officer (AMSO) (previously referred to as TACOPS Officer) for planned aircraft survivability, to include electronic warfare.

Almost all operations today affect the electromagnetic spectrum (EMS) and need a team of EW professionals that include aviators and EW technicians coupled with intelligence and signal Soldiers to set the conditions for success.



CW2 Marlon S. Atherton conducts EW synchronization with CAB headquarters during combat operations.

With the addition of an EW technician, the AMSO now has a colleague, who can focus on preventing spectrum fratricide by ensuring friendly and enemy EW systems produce only minimal effects on the aircraft EW equipment.

EW in the Army represents the military use of the EMS and directed energy. It has been a rapidly developing and expanding career field across the Army since 2008. Through radio frequency (RF) attacking and sensing, electronic warfare technicians (EWTs) bring options within the EMS to the commander, which ensure friendly systems remain effective while degrading or denying the enemy's ability to use the EMS.

As a force multiplier and a mission enabler EW is not limited to just RF, but includes optical, acoustical, and infrared emissions as well. Although complex in nature, EW must be fully integrated and synchronized with in aviation operations. This is accom-

plished through the coordinated effort of the AMSO, EW, S-2, and S-6 sections in order to achieve its full potential in contributing to mission success. For clarity purposes and to view areas of convergence and divergence a fundamental understanding of each area of expertise is required.

Following are the duties and responsibilities of the EWT and the AMSO. Similarities and areas of overlap between the two are easily distinguishable, but due to wording and description the differences are not as easily detectable.

### **EWT Duties**

EWTs analyze, plan, organize, integrate, monitor, and assess EW operations, the threat environment, and EW technical requirements. The EWT focuses the efforts of EW systems, both air and ground, against adversary personnel, facilities, or equipment with the intent of denying, degrading, neu-

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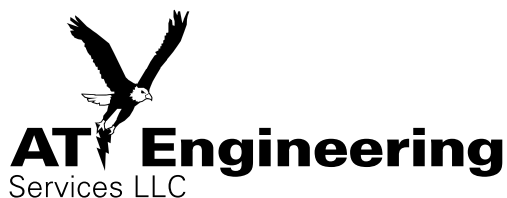
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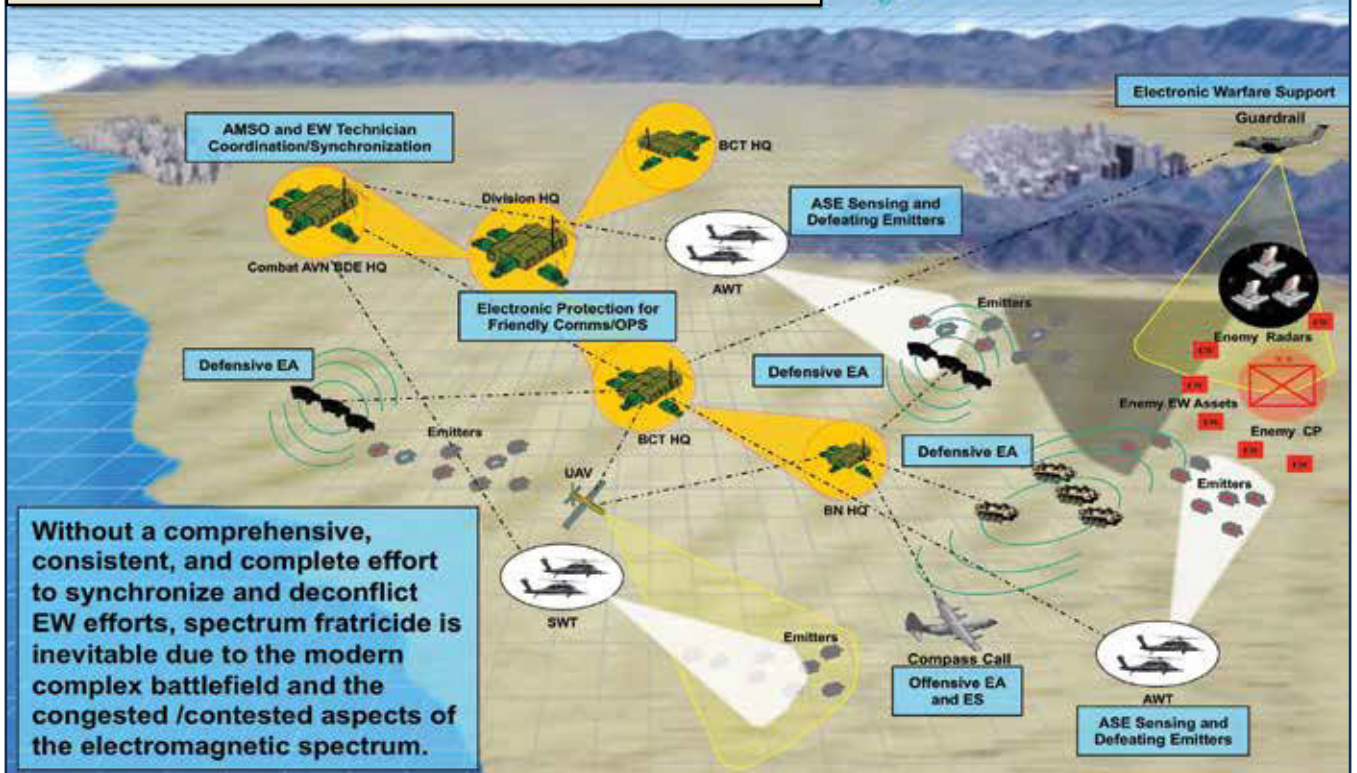
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# The Complex Electronic Warfare Battlefield



tralizing, defeating or destroying enemy capabilities. They enhance operations through active coordination, integration and de-confliction of EW during mission preparation and execution. The EWT will integrate EW into the targeting and planning process as well as assist in the development of the enemy EW order of battle, EW target information and products, intelligence, and target selection standards.

## EWT Responsibilities

- Advise commanders on capabilities and employment of EW assets
- Monitor Electromagnetic Spectrum (EMS) for indications and warnings enabling immediate threat recognition and targeting
- Coordinate external support for EW mission requirements and integrate EW into planning/targeting processes to include EW Combat Assessment
- Reprogram EW ground equipment
- Quality assurance, quality control and prioritize EW requests from subordinate units
- Assist in training of unit, staff (leadership), and subordinate units in all facets of EW

## AMSO Duties

The AMSO is the commander's primary advisor on aviation mission survivability (AMS). AMSOs conduct

combat survivability analysis and aircraft survivability equipment (ASE) and personnel recovery (PR) program management. The AMSO performs Army Aviation electronic warfare operational planning and Aviation Mission Planning System (AMPS) administration.

The AMSO provides support to the intelligence section's threat analysis, identifying enemy threat capabilities and limitations which affect the commander's ability to conduct aviation missions in the assigned area of responsibility.

## AMSO Responsibilities

- Advise commanders on aviation mission survivability
- Combat survivability and enemy threat system analysis
- Reprogram ASE and recommend ASE configuration
- Integration of joint assets
- Development of aviation TTPs
- Serve as the unit Personnel Recovery Officer within Aviation units
- AMPS administration
- Assist in training members of ground maneuver brigade aviation elements (BAEs) and subordinate unit AMS officers.

## S-2 / S-6

Although key members of the team, they are not focal to this discussion. The S-2 is focused on the collection of intelligence and the S-6 ensures all forms of friendly communications operate effectively and are protected. This relates directly to the electronic warfare support (ES) and electronic protect (EP) sub-categories of EW. Electronic Attack (EA) conducted by the AMSO and EWT has the potential to cause problems with signals intelligence (SIGINT) or collection and communications.

ES should go hand-in-hand with EA so proper cueing can be conducted. If proper coordination and synchronization are not conducted, confidence in the execution of ES and EP is sure to be degraded. Losses of intelligence and communication fratricide are of no benefit to any unit.

It is sometimes neither understood nor clear who is best suited to conduct important tasks based on training and experience alone. This, coupled with units trying to conduct complex missions in unfamiliar territory, can lead to varying degrees of success.

EW is a focal point of contention in aviation due to its complexity and its effect within the EMS, mainly on aircraft communications and system interoperability. The more the EWT knows about ASE and the more the AMSO

knows about other spectrum activity, the better chance that problems can quickly be identified and alleviated.

A greater understanding of how the team (AMSO, EWT, S-2, and S-6) ties together and the much needed overlap should result in excellence in execution.

To efficiently conduct operations in a very dynamic, traffic jammed super-highway known as the EMS, it is imperative that the EWT and the AMSO work together along with the S-2 and S-6. All members of the team need a basic understanding of how ASE works.

The AMSO is lead with the EWT focusing efforts on the effects EW has in the EMS with respect to ASE and other equipment. A concerted effort will maximize ASE effectiveness to protect the aircrew.

### Cross-Over Duties

The following are key cross-over duties that span across several layers of expertise:

- ASE interoperability/synchronization (AMSO/EWT/S-2)
- Reprogramming of ASE/EW ground equipment (AMSO/EWT)
- Electronic Order of Battle (EOB)/ Electromagnetic Operational Environment (EMOE) and its effects on Aviation operations (S-2/AMSO/EWT)
- Joint Restricted Frequency List (JRFL) coordination/deconfliction to include team internal frequencies (prevent communications fratricide) (S-6, EWT, AMSO)
- EW support for security of forward area refuel/rearm points (FARPS)/forward operating bases (FOBs) to include equipment (CREW, Gator, Duke EA, etc.) and personnel (EWT/AMSO/S-2)
- EW support for logistic resupply



WO1 Steven P. Quast prepares EW equipment with proper load set prior to leaving the FOB.

U.S. ARMY PHOTO BY SGT BRANDON BEDNAREK, 4TH BCT, 1ST ARM, DIV, P&O

to the FARPS (CREW equipment and planning) (EWT/AMSO/S2/S6)

- Security for Pathfinder operations (EWT/S-2)
- EW support for PR (AMSO/EWT/S-2/S-6)
- Prevent loss of key/critical intelligence/EA cueing (AMSO/EWT/S-2)

### Summary

In order for EW to become effective in the CABs, commanders and staff must make a conscious effort to integrate these junior grade EWT warrant officers into the team. WO1s are arriving at most CAB units to fill a CPT, CW3, and CW2 slot without much assistance. They need the mentorship of the senior AMSO warrant to fulfill their role.

It is crucial the 290A works closely with the AMSO to ensure the CAB's

EMS footprint is properly coordinated with the JRFL, ground units, and higher headquarters in order to mitigate frequency fratricide.

The 290A needs to be trained on all ASE equipment and have a firm understanding of how it supports the mission to "best" serve the commander. This would give them the needed exposure to the EW systems installed on CAB aircraft and a better understanding of aviation operations. It would also enhance the working relationship between the EWT and AMSOs.

By forming this team of AMSO, EWT, S-2, and S-6 personnel, the CAB will be postured to seize and exploit the initiative to gain and maintain spectrum dominance, while achieving the commander's intent.



CW4 Brian S. Filibeck is currently serving as the Proponent Manager of the Electronic Warfare Branch at Fort Leavenworth, KS; he has multiple deployments to OEF, OIF, and Kosovo and previous assignments include Division Targeting Officer at the 25th and 42nd Inf. Div., Senior Observer Controller/Trainer in 1st Army, and Brigade Targeting Officer at the 10th Mountain Div. CW4 Corey M. Swetz is currently serving as the Senior Instructor for the Electronic Warfare Technician Warrant Officer Advanced Course at Fort Sill, OK; he has three deployments to OIF and previous assignments include Electronic Warfare Technician at the 75th Fires Bde. and as a TACOPS Officer and an AH-64D Maintenance Test Pilot in Germany and at Fort Hood, TX.



WO1 George A. Warner and SSG Sean E. Adkins initialize the Universal Test Set to ensure EW equipment is operating at the proper frequencies.

U.S. ARMY PHOTO BY SFC PHILIP SBILL, 1ST BCT, 25TH INF, DIV.



# Training the Aviation Maintenance Force

By CSM James H. Thomson Jr.

*Our real problem, then, is not our strength today; it is rather the vital necessity of action today to ensure our strength tomorrow.*

– Dwight D. Eisenhower

I recently had the privilege of spending a few days at Joint Base Langley-Eustis (JBLE) in Virginia visiting with the 128th Aviation Brigade and the phenomenally talented team of Soldiers and civilians assigned to the organization.

It was amazing to witness the depth and breadth of their operation masterfully executed around the clock achieving unmatched levels of quality.

For those unfamiliar with the 128th let me start with a little history, lineage and honors of the unit.

The 128th Aviation Brigade was “Born Under Fire” as a provisional unit during Operation Just Cause, Panama in December 1989.

The brigade was later formally activated on January 16, 1990 in Panama where it continued to serve until its inactivation on October 15, 1995.

The 128th Avn. Bde. was awarded the Armed Forces Expedition-Panama Campaign streamer for its participation in Operation Just Cause.

On February 1, 2012 the 128th Avn. Bde. was re-activated at Joint Base Langley-Eustis as the headquarters responsible for Army Aviation’s logistics training mission.

The brigade is comprised of three aviation battalions with a cadre and staff of over 900 extremely competent Soldiers and civilians training 6,200 plus students annually in 77 different



PVT Dustin Westpool, an Advanced Individual Training student assigned to the 2nd Bn., 210th Avn. Regt., repairs CH-47 Chinook flight controls during a class at Joint Base Langley-Eustis, VA, Feb. 20, 2013.

courses both for advanced individual training (AIT) and the track portion of our NCO’s professional military education (PME). The brigade operates three shifts on a 24-hour cycle and has students from 118 different nations in attendance with 11 courses taught completely in Spanish.

The 1st Battalion, 210th Aviation Regiment is responsible for the instructors, writers and training developers that execute and oversee all courses pertaining to attack and armed reconnaissance airframe and armament systems (15R, 15Y, 15S, 15J); electrical and avionics military occupational skills (15F, 15N); and aviation warrant officer technicians (151A). Combined, the dedicated cadre of 1-210th trains over 2,300 students annually.

Similarly, the 2nd Bn., 210th Avn. Regt.’s team of competent and committed professionals provides oversight and executes all programs of instruction for utility and cargo mis-

sion design series aircraft and systems (15T, 15U); powerplant (15B), powertrain (15D), structural (15G), and pneumatic (15H) subsystems; and Latin American courses for multiple MOSs. Each year 2-210th trains more than 3,700 students for the aviation branch and our allies.

The 1st Bn., 222nd Avn. Regt. is comprised of cadre and staff numbering 115, most of whom are staff sergeants and sergeants first class serving as AIT platoon sergeants.

These devoted leaders of character from across Army Aviation give their all to the soldierization process of our AIT student population deftly preparing them to enter our profession and proudly call themselves a “Soldier.”

At any given time, there are some 1,200 to 1,400 AIT students in residence at 1-222nd that are housed, fed, marched to and from school, trained on the warrior tasks and battle drills, indoctrinated with the Army Values and Warrior Ethos, and developed

both physically and mentally to meet the demands of being a Soldier in today's Army.

All the while our AIT platoon sergeants are building and preserving a foundation of trust within these young energetic students who are indeed the strength of tomorrow for our branch. There is no doubt that the leaders of "triple deuce" are making a positive and lasting impact on our newest aviation Soldiers that will set the tone for their Army career.

Nearly 70% of all Army Aviation Soldiers are trained at the 128th Avn. Bde. both as initial entry trainees and as noncommissioned officers attending PME. With just over 600 NCOs assigned to the 128th serving as instructors and AIT platoon sergeants there should be little doubt as to the criticality of this mission or the value of those serving to accomplish said mission.

During my visit, I was extremely impressed with the Army's recognition of and commitment to the 128th's important and complex task at hand by investing significantly into the construction of a new barracks complex and a state of the art dining facility capable of housing and feeding more than 2,000 students concurrently.

The DFAC is actually designed to



Students attend the Utility Helicopter Repairer's Course at the 128th Avn. Bde., JBLE, VA on June 20, 2013. (left to right) PVT Tuyen Phan, PFC Miguel Telles, and Airman Donald Sweeney.

feed a dinner menu to students on the first level while simultaneously feeding a breakfast meal to the night students just starting their shift on the second level of the facility.

If you are reading this and find yourself thinking it might sound like a pitch for NCOs from across our combat aviation brigades to volunteer to serve in the 128th Avn. Bde. sometime during their career, then I have achieved my goal. Our branch does indeed need relevant, competent NCOs of character to serve a two or three year tour of duty at any one of our training brigades throughout the United States Army Aviation Center of Excellence (USAACE).

If as you are reading this you find yourself thinking the branch CSM sounds especially proud of the 128th, you are again absolutely correct.

While I am extremely proud of all of the units across the USAACE, I found my recent visit to JBLE to be a great opportunity to highlight the impressive efforts ongoing at the 128th Aviation Brigade; *your* aviation logistics training center of gravity.

Above the Best!

CSM Thomson

[james.h.thomson4.mil@mail.mil](mailto:james.h.thomson4.mil@mail.mil)



CSM James H. Thomson Jr. is the command sergeant major of the Aviation Branch and the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.

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# No Season For Risk

By CSM Richard D. Stidley

**A**utumn offers something for everyone. The coming and going of Labor Day means cooler weather, a return to regular schedules with kids back to school, and most of all, the start of football season (my favorite time of year!).

Many Soldiers eagerly await the start of hunting season, while others are ready to start the countdown to time off around the holidays. What we can't look forward to, however, is a "slow" season for safety – just because the summer is over doesn't mean we can fall into complacency.

Soldiers at installations across the southern and western United States enjoy nice weather far longer than those in other parts of the country, and accidents are a good reflection of that. Between Labor Day and Dec. 1 last year, we lost 12 Soldiers on motorcycles; seven were NCOs.

There's no doubt about it – many, many Soldiers will continue riding until the weather forces them off their bikes, and that may not be for several more months.

As leaders, we can't let down our guard on the continuing issue of indiscipline on motorcycles. We must regularly check our Soldiers and ourselves to ensure every ride begins and ends safely.

Autumn and winter are the Army's high seasons for negligent discharges.

Three Soldiers fatally shot themselves between September and December 2012, all under the influence of alcohol and at least two with guests in their homes.

In many ways, young Soldiers are no different than college kids; they're going to congregate together off duty, and there's going to be alcohol involved more often than not.

But Soldiers might feel a little more invincible than the average universi-



U.S. military and civilian contractors watch a football game between the Chicago Bears and the Indianapolis Colts during a tailgate party.

ty student, given our profession and training with firearms.

It's leaders who have to bring them back to earth and show them even superheroes aren't immune to bullets, especially when you're cutting up with friends.

Speaking of alcohol, it's undeniable that some Soldiers try to "enhance" all their off-duty activities with it.

In fact, fixtures of autumn like football games and tailgate parties seem to invite alcohol use. And there's nothing wrong with that, as long as our of-age Soldiers drink responsibly.

Frank discussions about the risks of drinking and driving and even drinking and walking should be part of all our weekend safety briefs.

And, leaders should be walking the talk by setting the standard and being the right example to follow.

It's not about you anymore – what

you do today influences your Soldiers' behavior more than you know.

'Tis the season for accidents, every day of the year. A turn of the calendar won't keep our Soldiers safe, but we can through engaged leadership and a focus on training, discipline and standards around the clock.


The USACR/Safety Center is ready to help with the annual Army Safe Autumn Campaign, available at <https://safety.army.mil>.

Check it out and let me know what you think and how we can better help you keep up the good fight. Most of all, enjoy this fantastic season while it lasts, but always play it safe!

Army Safe is Army Strong!



*CSM Richard D. Stidley is the command sergeant major of the U.S. Army Combat Readiness/Safety Center at Fort Rucker, AL.*



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# U.S. Army Aircraft Survivability Equipment

By CW3 Fernando Ortiz

*This month, CW3 Fernando Ortiz with 1-222nd Bn. gives a breakdown of the aircraft survivability equipment aviation Soldiers are familiarized with and taught to maintain.*

*COL Rigole, Commander*

To triumph over unforeseen conflict now and in the future United States military aircraft have been equipped with advanced technology aircraft survivability equipment (ASE). The focus of ASE has been predominantly for Army helicopters and their crew, due to their high threat and close combat missions in present conflicts.

ASE provides detection and countermeasure systems to safeguard the aircraft and its crew. These ASE systems reduce aircrew fatigue, increase situational awareness and provide superior aircraft lethality.

The elements that comprise the majority of ASE classifications are radar, laser, and infrared (IR) / ultraviolet (UV) detecting, warning, and countermeasure systems. ASE provides 360 degree protection for military aircraft, detecting and identifying enemy weapon engagements.

ASE systems transmit warning commands and displays to the crew station, immediately after identified. With these support devices pilots are able to counterattack the enemy in a timely manner avoiding direct contact from enemy fire. Besides detecting and identifying the enemy, ASE counters the enemy electronically by jamming and decoying their infrared guided or laser aided weapon systems.

Electronic Combat (EC), which is defined as the action taken in support of military operations against enemy electromagnetic (EM) capabilities, consists of three com-



Laser Warning Sensor

ponents: electronic warfare (EW); command, control and communication countermeasures (C3CM) and suppression of enemy air defense (SEAD).

EW uses electromagnetic energy to exploit, reduce or fully prevent hostile use of the electromagnetic spectrum. C3CM is used to counter the enemy or deny the enemy command, control and communications capabilities needed for control of combat forces and to protect our command and control capability. SEAD is conducted to destroy or temporary degrade surface-based enemy air defenses by destructive and/ or disrupted means.

As the enemy improves their methods to successfully attack U.S. military aircraft, the Program Executive Office, Intelligence, Electronic Warfare & Sensors (PEO IEW&S) and companies such as BAE Systems, Northrop Grumman and Goodrich (formerly Hughes) continue to improve and equip our military with the most current high tech and updated ASE.

## AN/AAR-57 Common Missile Warning System (CMWS)

Replacing the legacy AN/ALQ-144 and AN/ALQ-156 systems, the AN/AAR-57 CMWS is an advanced sensor, flare/chaff dispensing system that protects the aircraft from infrared and radar guided missiles. Pilots have the capability to set the CMWS to automatically or manually dispense countermeasures.

Although each aircraft platform is different, the CMWS essentially consists of up to five electro-optical missile sensors (EOMS), an electronic control unit (ECU) and the Improved Countermeasures Dispenser (ICMD) system. The



Chaff Dispenser

EOMS passively detect ultraviolet (UV) energy from the incoming missile or missiles and sends the unique signal to the ECU.

The ECU processes all detected input signals from the EOMS and sends audible warning and visual displays to the crew station.

The ICMD protects against missile threats by dispensing chaff or flares in a pre-programmed order when the system receives a threat signal. The full sequence occurs in less than one second, from detecting to jamming.

Combined with the CMWS is the Advanced Threat Infrared Countermeasure system (ATIRCM); a reliable system currently in use today that has been successful against multiple infrared air defense missile engagements by sending pulses of several frequencies from the sensors that jam incoming heat seeking missiles.

The purpose of these two systems combined is for the CMWS to detect and cue the infrared jamming system to the incoming missiles, and the ATIRCM to counter the attack by discharging a high energy beam of IR to defeat the missile's infrared seeker.

### AN/AVR-2B Laser Warning System

The AN/AVR-2B Laser Detecting Set (LDS) consists of up to six sensor units and an interface unit comparator.

The LDS is a passive laser warning system that receives, processes and displays threat information from airborne and ground laser aided weapons. It sends threat messages to the Radar Signal Detecting Set (RSDS) digital processor. The RSDS is used in conjunction with the LDS to provide a 360-degree field-of-view horizontally and 45-degree field-of-view in elevation protection from laser threats.

The interface unit comparator provides power to the sensor units, processes threats and aircraft interface functions for the system constantly monitoring all sensors for current threat data via detect discrete and the message data link (a non standard asynchronous transmission line).

### AN/ALQ-136(V) Radar Jammer

Commonly used on the AH-64A/D Apache and CH-47 Chinook helicopters, the AN/ALQ-136(V) Radar Jammer is used to confuse enemy radar transmissions degrading return signals to where the data will be useless. The radar jammer consists of a transmit antenna, a receive antenna and a receiver transmitter. The transmit antenna radiates radar frequency jamming signals in the forward sector to counter certain threat radar systems.

The Receive Antenna receives radar threats within the designated frequency ranges and supplies the radar signals to the receiver transmitter (RT). The RT receives signals from the Radar Jammer Receive Antenna and processes them to determine if a threat exists. The Radar Jammer System initiates the assigned jamming signal to counter the radar threat once it receives, detects and processes threat signals.

Aircraft Survivability Equipment – protecting frontline pilots and aircraft against enemy forces with the most reliable and advanced electronic technology across the full spectrum of combat operations.



CW3 Fernando Ortiz is the executive officer for Company H, 1st Battalion, 222nd Aviation Regiment, 128th Aviation Brigade, Joint Base Langley-Eustis, VA.

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A UH-60 Black Hawk's common missile warning system fires flares in response to an identified threat.

PHASE COURTESY PHOTO

# PM Aircraft Survivability Equipment Update

By COL John R. Leaphart

I am excited about the opportunity to share with you an update on our progress towards providing world class survivability systems to the Army. Much has been accomplished in the aircraft survivability equipment (ASE) portfolio that will begin to be seen in the near future. Specifically, there are four major efforts on which I want to update you.

## CMWS

First is a major upgrade to the AAR-57 Common Missile Warning System (CMWS). In September, we will start fielding the 3rd Generation Electronic Control Unit (GEN3 ECU) to units in Afghanistan.

The GEN3 ECU comes with three major capability upgrades – a much more powerful processor, improved and expanded threat algorithms, and an initial hostile fire (HF) detection capability for small arms and rocket-propelled grenades (RPGs).

The upgraded processor is a significant increase in both processing power

and memory. Our ability to bring in an improved and expanded set of threat algorithms was completely dependent upon the increase in processing capability. In addition, it gives us the opportunity to insert the Army's first cut at an HF capability.

## ARWR

The next major effort is centered on developing an Advanced Radar Warning Receiver (ARWR). We have a three-phased approach in our overall radio frequency (RF) ASE program.

The first phase is to conduct an obsolescence upgrade to the existing system so that it is maintainable and sustainable for the immediate future. We have that upgrade on contract, the APR-39C(V)1, and will start fielding the heavy lift fleet with that system in FY14.

The next phase is to develop and field an Advanced Radar Warning Receiver (ARWR) that would provide a relevant capability against the existing and future threat. To accomplish this, we are planning on piggybacking on

the Navy's APR-39D(V)2 effort.

We have very common requirements in this mission area. Where they are not identical, the Navy has accommodated the more stringent of the two sets in the specification for the final system. We anticipate being able to field these to the attack fleet in FY17. The final phase will be the development of an RF countermeasure.

One of the reasons we are pursuing the APR-39D(V)2 is that it maintains an upgrade path for an integrated jammer. This provides a clean and low-cost route to get to an RF countermeasure without bringing an entirely new system to the platform.

## IASE

Integrated Aircraft Survivability Equipment (IASE) has been a much desired capability for multiple generations of Army Aviators and is the third major effort we are undertaking.

Our intent is to deliver that capability on the backs of the two efforts I just described to you.

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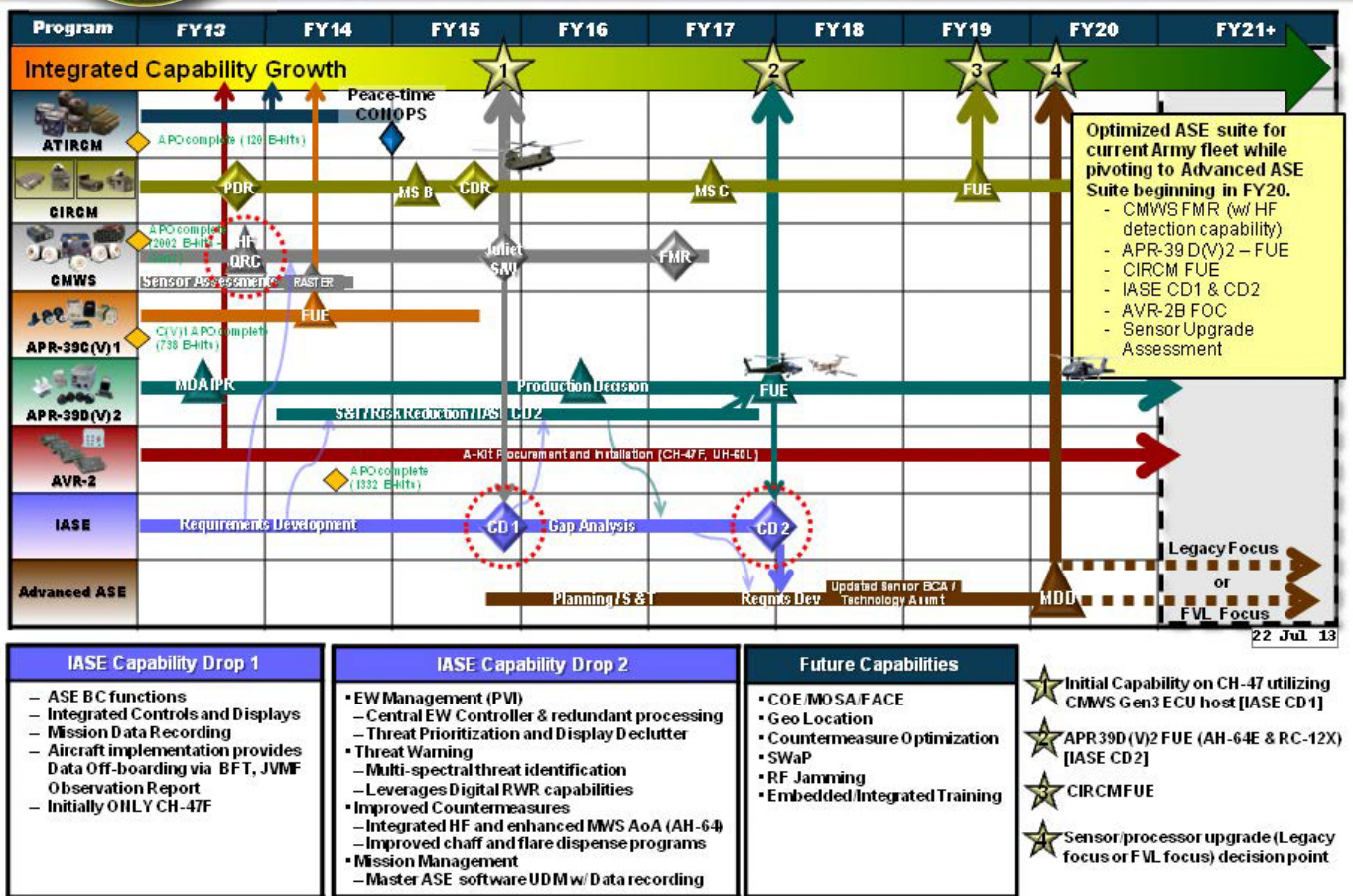
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Photo courtesy of U.S. Army

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# Near Term ASE Roadmap



The upgraded processing capability that comes with the GEN3 ECU allows CMWS to become the dedicated ASE bus/suite controller for the platform. This will make for a much easier platform integration effort, allowing for a greatly enhanced set of integrated controls and displays.

This level of platform integration also facilitates the off-boarding of data via Blue Force Tracker (BFT). This allows threat data generated by the ASE suite on board the aircraft to get into the network where it becomes actionable.

IASE Capability Drop 1 (CD1) will be delivered with the Juliet software release of CMWS on the GEN3 ECU and will make its first appearance on CH-47Fs in FY15.

IASE Capability Drop 2 (CD2) will come with the APR-39D(V)2. That software will provide greatly enhanced EW management for threat

prioritization and display declutter.

It will also add capability for multi-spectral threat identification, as well as improving the countermeasure response through integrated HF and Missile Warning System (MWS) AoA and improved chaff and flare dispense programs. The initial target for CD2 is AH-64Es in FY17.

## CIRCM

The final effort I want to mention is the Common Infrared Countermeasure, or CIRCM. We are in the middle of the technology development phase of the CIRCM program and the performance we have seen on the initial prototypes far exceeds our expectations at this point in time.

This program will begin to show up in the fleet in FY19, with UH-60s being the target aircraft for the initial fielding.

CIRCM will provide an overmatch capability against the existing threat for years to come, as well as provide the modular and adaptable capability required to respond to new threats as they emerge on the battlefield.

## FVL

This leads to a short discussion of Future Vertical Lift. The move to next-generation aircraft will eventually demand a move to next-generation ASE.

We are pushing as hard as we can on the above four efforts to push as much capability out to the existing fleet as we can. That way, in the FY20 timeframe and beyond, we will be prepared to put the bulk of our effort against developing the next-gen ASE suite.

We are making the science & technology investment now to shape that decision. Much effort has been put into

# The Future of ASE

## Moving toward an integrated solution



looking at current and future sensor technology and trying to understand just how much capability can be squeezed out of a single sensor array. For instance, is there a single sensor array that can provide capability against multiple threats while providing capability for degraded visual environment (DVE and other mission areas)?

Can capability be provided to size, weight, and performance (SWaP) constrained platforms through the implementation of a networked ASE capability where data is shared from platform to platform in a real-time fashion?

There are other questions and challenges that must be answered and overcome in order to be successful in achieving the right next-gen ASE suite for next-gen aircraft.

We are trying hard to put the requisite capability into the legacy fleet now so we are prepared to fully focus on next-gen aircraft when the time is right.



*COL John R. Leaphart is the project manager of the Aircraft Survivability Equipment Project Management Office at Redstone Arsenal, AL.*

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# Product Manager Air Warrior

## Update to the Field

SPECIAL FOCUS  
Aircraft Survivability  
Equipment

By LTC Spencer C. Guida and Mr. James R. Isaacs

Under the leadership of the Program Executive Officer Soldier and reporting directly to the Project Manager Soldier Warrior, the Product Manager Air Warrior (PM AW) is the Army's proponent for Aviation Life Support Equipment (ALSE). Fielding of the Air Warrior system is nearly complete, wrapping up in Fiscal Year (FY) 2014 as the 4th Infantry Division's Combat Aviation Brigade (CAB) stands up at Fort Carson, Colorado.

### Why Air SS

Although the Air Warrior system provides aircrews an effective and safe system, with a modular capability to support all mission configurations, ten years of continuous combat revealed capability gaps and limitations no amount of testing ever could.

Nearly one-quarter of aircrew members report trading off some degree of ALSE protection due to flight control interference associated with the bulk of equipment worn on the upper torso in a combat configuration.

The Air Warrior system was developed to effectively support the crewmember for average mission durations of 5.3 hours; but years of combat show mission durations are typically more than double that number.

The combination of extended mission durations and an average weight of 65-85 lbs (configuration dependent) impose significant fatigue and physiological stress on the crewmember.

Rotary wing aircraft mishaps as a result of loss of Situational Awareness (SA), including those caused by a lack of references in a Degraded Visual Environment (DVE), occurred at an alarming rate, costing the Army lives and scarce resources.

Training, experience, and modernized flight controls in digitized aircraft have reduced the incidence of these types of mishaps, but increasing crewmember situational awareness continues to be a challenge. This will be especially important for crews of the 750+ UH-60L aircraft lacking digitized flight control systems that are scheduled to remain in the Army inventory beyond 2024. In response, TRADOC's Program Office-Aviation Brigades, the Army's aviation user representative at Fort Rucker, Alabama tasked the PMAW to

### Helmet and Display Systems

- Improved HGU-56/P as the Common Helmet Platform
- Common Helmet Mounted Display (CHMD) and Headtracker for Aviators with Flight and 3D Degraded Visual Environment symbology

### Integrated Personal Electronics

- Integrated Soldier Power and Data System
- Personal Display Module
  - Mission Display Module (aircraft-mounted)
  - Soldier Computer Module
    - Lightweight Environmental Control System (Kiowa Warrior)
    - Radio Interface Control Module

### Layered Clothing Ensemble

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address these capability gaps by developing a material solution named the Air Soldier System (Air SS).

The highest priorities of the Air SS are to increase cockpit compatibility by reducing the bulk and weight of the ALSE worn by the Army's rotary wing aircraft crewmembers, and to improve the SA of the entire aircrew.

The Air SS will reduce bulk and weight in the critical torso area by integrating and combining the functions of separate items of survival and communications equipment, leveraging leading edge commercial protection technology, and by reducing the number of layers of protective clothing without compromising protection.

Air SS will improve the situational awareness (SA) of the aircrew to reduce mishaps in degraded visual environment (DVE) conditions by fielding a high resolution Common Helmet Mounted Display (CHMD) with magnetic head tracking and enhanced 3D flight symbology and cueing for aviators.

This will provide aircrews greatly improved heads-up SA, while providing an incremental capability to be leveraged by the future comprehensive DVE solution currently

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underway by PEO Aviation.

The Air SS will improve upon all the capabilities of the Air Warrior system, but in an integrated ensemble. In the first delivery of capability, the Air SS will include an improved helmet and display system, a suite of integrated personal electronics, and a new layered clothing ensemble.

The current HGU-56/P flight helmet will be improved to provide an increased Field Of View, an energy absorbing liner and retention assembly.

The legacy ANVS-7 HUD will be replaced by the CHMD, a single day/night/color display with high resolution three-dimensional (3D) SA flight symbology for all aviators except AH-64 Apache.

The Air SS 3D symbology was vetted through continuous demonstration and feedback from Army aviators with recent combat experience as participants in several Air SS Crew Station Working Groups (CSWGs) conducted at the Army Research Lab on Redstone Arsenal, AL.

The CSWG data demonstrated that the Air SS 3D symbology produced a 45% increase in aviator SA, reduced pilot workload by 32%, and reduced DVE-related crashes during the landing phase by 90%. In addition to the CHMD, SA will be increased for UH-60A/L pilots with the addition of two aircraft-mounted Mission Display Modules (MDMs) that replace the Electronic Data Manager (EDM).

These will be high resolution 8" x 4.5" folding displays mounted on the outboard of each instrument panel. In addition to providing current EDM functionality, the MDM can display video input from the sponson-mounted Forward Looking Infrared Radiometer (FLIR) and is high-definition multimedia interface (HDMI) capable for future DVE sensor feeds.

## Personal Electronics Suite

The suite of integrated personal electronics consists of a single body worn processor, display, conformal battery, power manager and a power and data harness, replacing many of the electronic devices currently mounted to the body along with their disparate displays, processors, and batteries. The aircraft will provide the primary power source, while the 72hr conformal battery is simultaneously charged for dismounted operations.

The Soldier Computer Module (SCM) will control all electronic devices while still providing all the functionality of the current EDM. This will be controlled via the Personal Display Module (PDM), a smart-phone sized touch screen display worn by all crewmembers, both rated and non-rated, as the single user input and control.

The power manager distributes the correct voltage from either aircraft power or the new conformal battery to each of the crewmembers' individual electronic devices via a ruggedized ribbon cable harness that attaches to the current AW Primary Survival Gear Carrier (PSGC).



**Air Soldier System 3D Degraded Visual Environment (DVE) flight symbology, as displayed to the aviator through a Helmet Mounted Display (HMD) during the July 2013 Crew Station Working Group at Redstone Arsenal, AL.**

## Capabilities

The initial delivery of Air SS will significantly reduce bulk and weight through a new layered clothing ensemble using the latest in textile technologies and combining the functionality of multiple items.

A new Soft Armor Ballistic Insert will save over three pounds as compared to the current AW soft armor while providing the same level of protection.

Functionality of items will be combined with new standardized 72 hour survival items, including the introduction of a folding survival/escape knife to replace the current Aircrew Survival Escape Knife; an improved cooling vest that is as thin as a performance T-shirt; a Lightweight Immersion Suit for Aviation providing cold water immersion protection; Heating Elements for Aircrew

Torso (HEAT), delivering commercial active (powered) warming technology to the crewmember's upper torso; and a Lightweight Joint Protective Air Crew Ensemble for chemical and biological protection with reduced bulk.

In the follow-on delivery of capability, a new Aircrew Protective Ensemble (APE) will replace the current PSGC, with the suite of personal electronics now fully integrated into the APE, including a new Radio Interface Control Module (RICM).

The RICM will replace both the current Combat Survivor Evader Locator survival radio and the Encrypted Aircraft Wireless Intercom System Enhanced Mobile Equipment radio by combining their functions into a single, small form factor, with user interface and control through the PDM.

At this point, the PDM will also display full EDM functionality from the SCM to the rear crewmembers of utility and cargo aircraft, providing them with the same SA as the pilots. Added capability provided by the APE includes body armor directly integrated with the survival gear carriage; elimination of the body mounted life raft; a personal flotation device as an integral part of the gear carriage system as opposed to a clip-on attachment; and higher capacity emergency escape breathing devices with reduced size and weight.

Development of the Air SS began in FY12, and the first delivery of capability to the field is scheduled for FY15. Fielding is scheduled for three combat aviation brigades per year.

*LTC Spencer C. Guida is the Air Warrior Product Manager and Mr. Jim Isaacs is the PM Air Warrior Program Integration Principal, both located in Huntsville, AL.*





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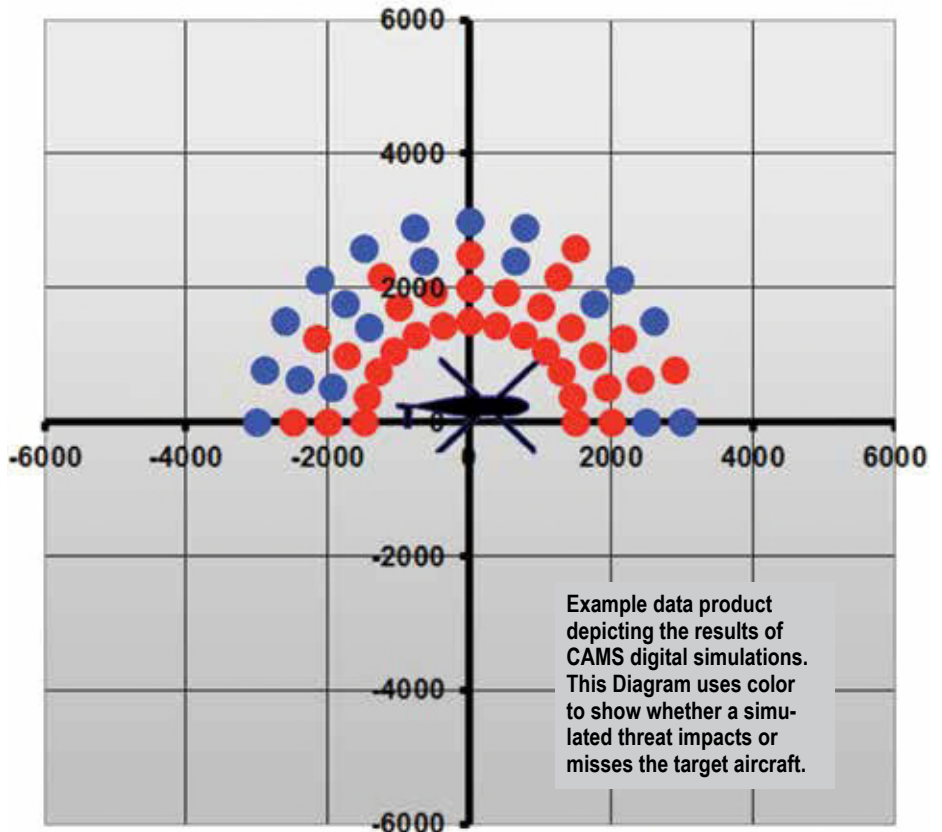


SPECIAL FOCUS

Aircraft Survivability Equipment

# Ensuring the Survivability of Army Aircraft

By Mr. Mark J. Calafut and Dr. Leslie Litten



Decoy efficiency 37%

D : Decoyed
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**O**n the modern battlefield, Army aircraft encounter a wide variety of hostile threats, ranging from ballistic munitions to sophisticated guided missiles. Within this broad threat-space, man-portable air defense systems (MANPADS) are unique in their combination of effectiveness, portability, and proliferation.

Principally, MANPADS are small surface-to-air missiles that can be transported and launched by a single operator. After a MANPADS operator establishes an aircraft as the target, the missile is fire-and-forget and will autonomously fly to intercept. Hundreds of thousands of MANPADS have been built worldwide and the threat systems are currently produced by dozens of different countries.

Historically, Army aircraft have been protected from this prolific threat by employing countermeasures that disrupt the tracking system of an incoming missile. This disruption causes the incoming missile to lose track of its target and fly to an incorrect location.

Although conventional MANPADS



The above diagram depicts the CAMS red and blue team approach.

have existed for decades, recent advancements in electronics and sensor technology are leading to the development of a new class of emerging MANPADS. These threats will have enhanced capabilities, including improved ability to track targets, increased hit point accuracy, and superior resistance to aircraft countermeasures.

As the Army develops its next-generation aircraft survivability equipment (ASE), its scientists and engineers are considering not only the capabilities of current threat technology, but also the expected evolution in capabilities of

future threats. This forward-looking research and development process is essential to ensuring the long-term survivability of Army aircraft.

### Counter Advanced MANPADS (CAMS)

The Army's Communications-Electronics Research, Development, and Engineering Center (CERDEC) is currently leading science and technology (S&T) programs to ensure the protection of aircraft against advanced threat systems.

In the Counter Advanced MANPADS S&T program, CERDEC en-

gineers and scientists are specifically developing ASE technologies to defeat emerging MANPADS.

The research and development process in the CAMS program is inherently different from the traditional countermeasures development process. Typically, countermeasures are developed by characterizing existing threat systems and identifying specific vulnerabilities.

In creating countermeasures to future threats, threat hardware is still in development and is unavailable for characterization or testing.

To overcome this challenge, CERDEC is implementing the CAMS program using a competitive red and blue teaming approach. This novel approach to countermeasures development has jump-started the research process and is allowing the Army to remain ahead of emerging threat technology.

### CAMS Simulation Environment

The CAMS S&T program is executed in a state-of-the-art countermeasures development laboratory at CERDEC facilities in Aberdeen Proving Ground, MD. The CAMS laboratory serves as the primary simulation en-

vironment in the CAMS program and provides the core capability to assess the effectiveness of countermeasures.

It is capable of realistically simulating the flight of aircraft and missiles using a combination of digital models and hardware systems.

In the laboratory environment, missile flight conditions are replicated using a 3-degree of freedom flight motion system and representative scenery is generated using a high-fidelity scene projection system. The CAMS laboratory can be configured to simulate a variety of aircraft, flight profiles, and engagement geometries.

This versatility allows CAMS engineers to collect statistical data on the performance of countermeasures over a wide range of test scenarios. Within the CAMS program, these capabilities are essential to implementing the CAMS Red and Blue team competition.

### CAMS Methodology

The CAMS program is structured as a team-based competition that occurs within the laboratory simulation environment. The program involves three engineering teams, each with different objectives and skill sets. Two of

these teams, the CAMS Red Team and the CAMS Blue Team, act as competitors within the simulation environment, while the third team, the CAMS White Team, functions as the independent evaluator of the competition.

Gradually, throughout the program, the CAMS White Team adjusts the test conditions of the competition, forcing the Red and Blue Teams to adapt and improve. This process of iterative improvement leads to the development of robust and effective countermeasures.

### CAMS Red Team

Within the CAMS development competition, the CAMS Red Team is responsible for anticipating and simulating the capabilities of emerging MANPADS. This requires the Red Team to thoroughly understand not only the technologies associated with emerging threats, but also the approach and mindset of MANPADS developers around the world.

The CAMS Red Team collaborates directly with intelligence centers and other government agencies to characterize the major trends and priorities in the MANPADS development community.


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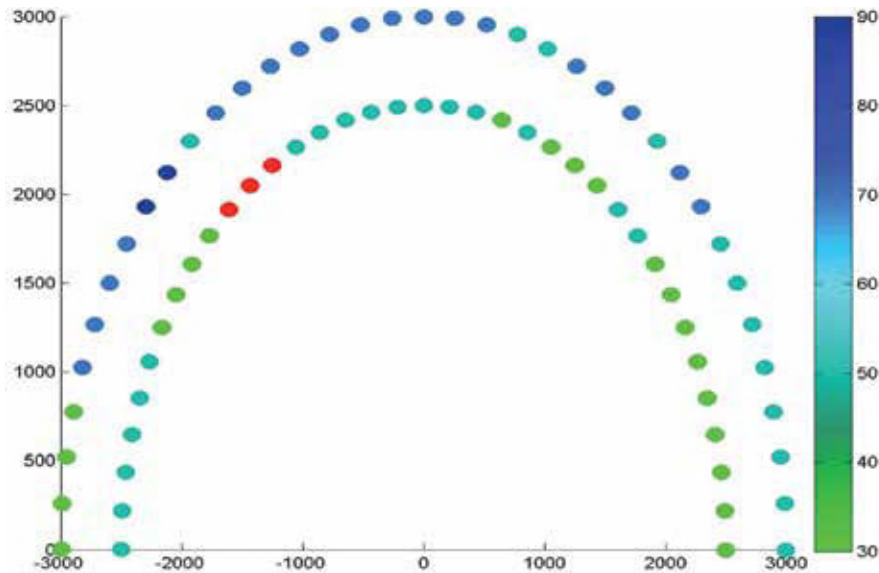
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Example data product depicting the results of CAMS digital simulations. This diagram uses color to show the degree by which a simulated threat misses the target aircraft.

The Red Team also identifies fundamental trends in the development of threat component technologies by reviewing relevant open-source literature, academic publications, and patents.

Subsequently the Red Team applies subject matter expertise to build software and hardware threat models that are tested in the CAMS laboratory. These models are designed to be re-programmable and adaptable, allowing for rapid implementation of a wide range of threat representations.

### CAMS Blue Team

In parallel, the CAMS Blue Team is responsible for developing novel countermeasures that can effectively defeat Red Team threat models. This requires the Blue Team to understand current countermeasures technologies and to upgrade or modify them to defeat emerging threats.

The Blue Team initiates the development process by researching signal processing and threat tracking fundamentals. It identifies essential components that are present in all emerging MANPADS.

Based upon this framework, the Blue Team is now developing countermeasures that attempt to disrupt these essential components.

This approach allows the CAMS Blue Team to create general-purpose countermeasures with potential effec-

tiveness against a broad spectrum of the Red Team threat models.

### CAMS White Team

The CAMS White Team is responsible for managing the Red and Blue team competition and evaluating the performance of each team. This requires the White Team to simultaneously test Red Team threat models and Blue Team countermeasures in the CAMS laboratory environment.

On a bi-monthly basis, the CAMS White Team collects the most recent threat models and countermeasures from each team to prepare for the evaluation process.

The CAMS White Team then designs test scenarios that represent realistic aircraft flight conditions, executes the tests in laboratory simulation, and compiles statistics on the performance of each team.

Following this evaluation period, the CAMS White Team provides detailed feedback to each team to help guide the development process and improve each team's performance.

Over time, the CAMS White Team analyzes aggregate results and draws long-term conclusions on the most effective and robust countermeasures.

### CAMS Data Products

The CAMS program provides a variety of valuable data products, including long-term statistical data and

detailed countermeasure assessment reports. However ultimately, the most significant data product of the program is the CAMS countermeasures database. This database of effective countermeasures techniques and technologies includes direct associations to specific Red Team threat models.

As emerging MANPADS begin to proliferate and are characterized, effective countermeasures will be identified from the CAMS countermeasure database. This will greatly reduce the lag period between the fielding of new threats and the availability of effective countermeasures for Army aircraft.

### Conclusions and Future Work

Throughout the Counter Advanced MANPADS program, CERDEC has placed an emphasis not only on exploring novel approaches for countermeasures development but also for reducing costs and working efficiently.

This has included collaborating with other laboratories and international partners to share laboratory assets, complete joint testing, and exchange analysis tools and documentation.

As critical S&T programs for aircraft survivability continue, CERDEC welcomes the opportunity to work collaboratively with new government agencies and industry partners.

Through the exchange of technical ideas and technologies, the next-generation of ASE will be developed efficiently and effectively, and the long-term survivability of Army aircraft will be ensured.

◆◆◆  
*Mr. Mark J. Calafut is the chief of the Electronic Warfare Systems-Futures Branch and Dr. Leslie Litten is the division senior engineer of the Electronic Warfare Air/Ground Survivability Division, Intelligence and Information Warfare Directorate (I2WD), U.S. Army Communications-Electronics Research, Development, and Engineering Center (CERDEC) at Aberdeen Proving Ground, MD.*



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During an awareness visit, ARAT engineer uses a portable simulator to demonstrate the APR-39 A(V)1 and CMWS systems to the Rhode Island ARNG.

ARAT COURTESY PHOTO

# The Army Reprogramming Analysis Team: Still Supporting Soldiers and Electronic Warfare During Change

By Mr. Michael J. Crapanzano

**E**lectronic Warfare (EW)...and the new Cyber-Electromagnetic Activities (CEMA) concept currently being defined...are critical capabilities that Soldiers require to win in today's operating environment and within our Army's operating concept.

The EW systems on Aviation and ground platforms will be as indispens-

able to successful land operations in the future as they are today.

However, the speed, accuracy, and agility required to modify those systems because of changes in threat capabilities is almost as critical.

The U.S. Army Communications-Electronics Life Cycle Management Command (CECOM) understands this tenet of supporting the warfighter.

In fact, CECOM serves as the critical link for reprogramming software in all Army EW systems.

Utilizing its rapid reprogramming infrastructure, CECOM's Army Reprogramming Analysis Team Program Office (ARAT) develops, delivers, and sustains software for electronic attack, support, and protect systems as well as other electromagnetic spectrum capabilities to afford commanders freedom of maneuver within the electromagnetic spectrum, recently termed the Cyber Domain.

Even while budgets and deploy-

ment presence contract, the ARAT mission and the scope of its efforts with CECOM's Software Engineering Center (SEC) are expanding as Army developers and sustainers realize that the ARAT affords them an efficient and effective means to maximize resources – the ARAT saves time and money.

Even with its success, the ARAT is adapting its organizational processes and infrastructure to even further increase efficiencies while still meeting its core responsibility of giving Soldiers the most capable system possible...even as we collectively adapt to the changes for the Army of 2020 and beyond.

### The ARAT Mission

CECOM's ARAT is chartered by the Headquarters, Department of the Army and as prescribed by Army Regulation (AR) 525-15, is the U.S. Army organization responsible for repro-



ARAT hardware technician utilizing the Baraga test set to trigger CMWS.

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ARAT assistant project lead prepares to test the AN/APR-39B(V)2 system with the AMES II RF Simulator.

gramming software in all Army EW systems.

The ARAT charter establishes the organizational elements needed to carry out its mission of proactively supporting Army operations.

That support is accomplished by providing the appropriate and timely notification of a change in the threat EW environment and that a valid reprogramming requirement exists.

After completing an analysis of the threat emitter, a system's software is modified and reprogrammed aviation mission data sets and ground EW threat loads are disseminated to EW system operators using a classified distribution and communications infrastructure.

In addition, the ARAT Operations Center provides 24/7 reach back assistance to the warfighter. Joint warfighters who use EW systems are the ARAT's primary and ultimate customer.

In keeping with that responsibility and in alignment with the Army Materiel Command and CECOM Strategic Plans for supporting joint warfighting superiority through world-class glob-

ally networked C4SIR systems, the ARAT has five mission requirements:

*Reprogramming Infrastructure Development* – Develop, establish, and equip a software rapid reprogramming infrastructure capable of responding to changes in threats systems within the time periods specified in AR 525-15, Software Reprogramming Policy for Electronic Warfare and Target Sensing Systems.

*Threats Analysis* – Continuously analyze threat data to identify new, modified, or changed threat system electronic signatures that may affect U.S. reprogrammable EW systems.

*System Impact Analysis* – Assess the impact of new or changed threat signatures on friendly EW systems and make recommendations concerning possible changes to hardware, software or tactics.

*Mission Software Reprogramming* – Develop and validate mission reprogramming software to counter the new or changed threat signatures in support of Army operations and tactical regions.

*Mission Software Distribution* – Provide a communication means to distribute or make readily available the new reprogramming mission software and corresponding supporting data from CONUS to Soldiers operating the fielded force protection systems.

Included in this mission requirement is providing units the data entry capabilities they need to install the mission software into their EW systems. This critical step is normally accomplished using ARAT-provided Mission Loader Verifier software, called the ARAT Survivability Software Loader, which is incorporated within the Aviation Mission Planning System.

## Organization

The ARAT EW system support infrastructure includes cells at Fort Rucker, AL, supporting the U.S. Army Aviation Center of Excellence; Huntsville, AL, supporting the Program Manager, Aircraft Survivability Equipment, and the Program Executive Officer, Aviation's platform PMs; Patuxent River, MD, supporting U.S. Navy and Army Research Laboratory PM activities; Yuma Proving Ground, AZ, supporting ground-based system field testing; Atlanta, GA, supporting research and development activities that contribute to EW and rapid repro-

gramming initiatives; and Washington, D.C., supporting the Department of the Army, G-3/5/7, Electronic Warfare Division.

Also included in this organizational structure is the Flagging Office at Lackland AFB, TX, and Threat Analysis operations also located at Fort Rucker.

## Effective Solutions

As the Army designs regionally aligned, scalable and tailorable formations, and Army Materiel Command (AMC) ensures its organizations sustain units for Full Spectrum Operations, the ARAT continues to develop and support the software required by the EW systems in those formations.

This effort is augmented by the ARAT supporting program managers as they simultaneously field, modernize and sustain the current array of aviation and ground EW systems, as well as assisting PM's in their development of new systems.

As a result, the ARAT is in the early stages of EW system planning, design, and development in an effort to create sustainment efficiencies after system fielding.

As part of the CECOM Strategic Plan to drive enterprise processes to provide life cycle support to Soldiers, the ARAT recognized that all Army Aviation Mission Survivability Officers (AMSOs) and Electronic Warfare Officers (EWOs) supporting the reprogramming of EW force protection systems were affected as a result of restrictions of Communications Tasking Order 10-133 (CTO 10-133) and its prohibition on the use of removable media as well as CTO 10-084 that prohibits the use of USB and flash media devices.

The ARAT sought and received Army-wide approval for the 5,500 AMSOs and EWOs to use removable media (specifically CD/DVD) and the Common Missile Warning System (CMWS) personal computer memory card international association (PCMCIA) card for the rapid reprogramming of their aviation and ground EW systems.

The ARAT has created instructions for AMSOs and EWOs to utilize the approved CTO 10-084 for the CMWS PCMCIA card and CTO 10-133 enterprise waivers.

Contact the ARAT for copies of the waivers and instructions,



ARAT Engineer testing the RFIS system with the Micro AMES RF Simulator.

or for any questions regarding this issue (NIPR: [arat@sec.army.mil](mailto:arat@sec.army.mil)/SIPR: [arat\\_admin\\_team@arat.army.mil](mailto:arat_admin_team@arat.army.mil)) or phone 443-861-3592/3593 DSN: 848.

### Moving Forward

As the U.S. Army moves into the next evolution of changes, it is critical that CECOM's ARAT collectively develop processes that provide the Army with the ability to maintain EW systems through operationally effective and fiscally efficient software reprogramming.

Whether it is the migration of sustainment from original equipment manufacturers to an Army organic capability...or the Army bringing this cost-efficient model to Aviation User Data Modules and Operational Flight Program reprogramming efforts...or Counter Radio Controlled Improvised Explosive Device Electronic Warfare loadsets...there must be a collective and concerted effort to save the Army money while still providing the Soldier a more robust tactical solution.

It should not be considered an "either-or" problem – rather, it must be an "and" solution.

The Army has recently defined the concept of CEMA within its doctrine and is now determining the linkages between the three interrelated lines of effort.

As in most conceptual initiatives, there is a level of confusion, uncertainty, and gaps in how cyber, EW,

and electromagnetic spectrum operations should, and must, be integrated. Accomplishing that during a period of reduced budgets will make the task even more difficult. However, in spite of the challenges, there are also unprecedented opportunities rapidly approaching decision makers in both the Army and in industry.

The Army will use CEMA to affect future outcomes. A dialogue must start now and that dialogue must be broader than just CEMA.

It must include the requisite convergence of CEMA-enabling functions, such as intelligence collection and vetting, the efficacy of the Army software reprogramming infrastructure, the preponderance of federated systems on our aircraft in a time when open architectures are vital, and the availability of the Global Information Grid (GIG) countered by the need to defend it against attack.

These are just some of the overarching CEMA "enterprise" conversations that must also commence.

The Cyber Domain, using the electro-magnetic spectrum, will be the next warfighting domain where the Army will need to ensure superiority and afford commanders freedom of maneuver. EW systems and rapid reprogramming capabilities can and will be adapted to ensure that an AMSO or EWO has the software and informational awareness required to support those commanders.

Whatever CEMA-based systems

are fielded, CECOM's role of providing the Army a single manager of joint tactical command, control, communications, computers, intelligence, surveillance, & reconnaissance (C4ISR) systems, as well as being a value-added member of the Army IT community, will be a critical link to that modernization effort.

Army Aviation has been on the forefront of innovation and employing technology to defend our nation.

The coordinated partnership between system program managers, defense industries, academia, research and development organizations, requirements proponents, and capability managers leverages existing infrastructures into a cooperative enterprise methodology that offers enhanced, economical and software engineering solutions that can be rapidly delivered to U.S. Army air and ground forces.

That is, if a system's software is going to be reprogrammed at a time and in a manner that allows the Warfighter to seize, retain and exploit an advantage over our enemies in the Cyber Domain, then agility...speed...and the entire architecture that facilitates it, must also be addressed and defined.

The men and women of the CECOM's ARAT will continue to improve the EW/CEMA rapid reprogramming infrastructure, as well as their performance, their outputs, and the effectiveness of the systems they support so that Aviation Soldiers can continue to provide their superb warfighting capability to America's Army.



*Mr. Michael J. Crapanzano is the program officer of the Army Reprogramming and Analysis Team (ARAT) and deputy director of the Intelligence, Surveillance, and Reconnaissance Directorate, Communication-Electronics Life Cycle Management Command (CECOM) Software Engineering Center (SEC) based out of Aberdeen Proving Ground, MD.*



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## Aviation Mission Survivability



An AH-64D Apache launching flares during a Man-portable Aircraft Survivability Trainer (MAST) test at Yuma Proving Ground, AZ.

# Preserving Aviation Combat Power

By CW5 Michael S. Kelley

U.S. ARMY PHOTO BY CWS MICHAEL S. KELLEY

**H**istorical Perspective - Employment of aviation capability provides tremendous impact to the balance of forces on any battlefield as evidenced when balloons were introduced for observation and adjusting field artillery fires.

The introduction of manned aircraft changed warfare and ever since, man has been designing methods of destroying the opponent's aviation force. From installing machine guns on aircraft for direct action to the introduction of man-portable surface to air missiles during Vietnam, the methods used to target aircraft continue to advance.

Addressing this threat during the early days of aviation included designing aircraft capable of withstanding weapons effects. Most combat aircraft developers today will agree this is a course of action with diminishing returns. Exchanging fabric encased aircraft with sheet metal and wood structures with titanium is fairly straight forward; hardening the aircraft structure with full armor results in significant size, weight, and power issues.

Hence, today's combat aircraft are designed with vulnerability reduction as a part of the engineering process re-

sulting in a more survivable scenario if hit with a weapons system.

During the 1980s there was considerable discussion within the Army aviation community concerning surviving the hostile environment encountered on battlefields.

In the October 1984 issue of "Aviation Digest," CW2 Charles Butler authored an article titled *Threat Air Defense*. At the time, he was assigned to the Threat Branch at Fort Rucker, AL.

In his article, he mentions "Knowledge of the enemy, knowledge of his weapons and of their capabilities" was something no aviator should leave home without.

CW2 Butler lists Threat Air Defense Countermeasure Rules, the first of which establishes the goal of denying the enemy the ability to acquire targets. In closing his article he states "Though threat air defense should command our respect, it is hardly unbeatable. By realistic training, a true awareness of the threat and proper use of counter-measures, this giant can be cut to size."

CW2 Butler listed several passive and active counter-measures which continue to hold value today. The sur-

vivability scenario is enhanced with additional installed equipment capable of warning the aircrew through detection and displays.

Some of these systems provide decoys to the inbound threat systems through automatic expendables or aircrew action. The development of these survivability systems is essentially a never ending process because advancements in threat systems is an ever evolving industry.

The recent combat experiences during prolonged conflict in Afghanistan and Iraq have produced some meaningful tactical skills while at the same time allowed others to atrophy.

These operations pitted Army Aviation against an enemy with limited surface to air capability. The integration of an advanced infrared threat countermeasure system produced a large population of aviators more reliant upon systems and less reliant upon tactics.

There seems to be a prevailing attitude among many aviators today if you simply turn the aircraft survivability equipment (ASE) on, it will take care of you.

Certainly, our ASE systems have proven largely successful against an

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**A Man-portable Aircraft Survivability Trainer (MAST) with Weapons Engagement Signature Simulator (WESS) engaging a UH-60 at Ft. Hood TX.**

enemy with no air power or effective surface to air threat systems.

Facing an enemy with advanced integrated air defense systems (I-ADS) and a robust command and control capability would most likely result in a catastrophic outcome.

### **Aviation Mission Survivability Training**

The Army Aviation Mission Survivability (AMS) program is a holistic approach to preserving aviation combat power. During initial training as aviators at the U.S. Army Aviation Center of Excellence (USAACE) and initial readiness level progressions at the units, aviators focus on the technical aspects of employing their assigned airframe.

Individual tasks are practiced and evaluated both in scope of the evaluator-trainee perspective and complete one task prior to moving onto the next.

Once an aviator or crew member achieves readiness level one, they are partnered with experienced pilots-in-command and other aircrew as appropriate. Following this, the unit survivability officer begins to add scenarios to already scheduled training flights.

Crew level training encompasses the understanding of aircraft survivability equipment capabilities and limitations, employment of the aircraft, and an understanding of threat systems. This relates specifically to

own-ship protection.

Once all personnel are trained as integrated aircrew the unit training advances to collective scenarios.

Collective scenarios should be related to the unit's Mission Essential Task List (METL) and incorporated into every training mission. Commanders should leverage their AMS officers (AMSO) to prioritize this effort.

The most effective piece of aircraft survivability equipment on-board our aircraft is the aircrew.

Scenario based training events within simulation and in the actual aircraft are critical to achieving reflexive immediate actions on contact, safely executed with precision. Simply stated, tactics are used to deny our enemies the ability to effectively engage aircraft with threat systems.

When tactics fail and the enemy gets a shot, it is imperative to properly identify the threat system being used and select the most effective maneuver to counter the threat system's effectiveness.

Improperly identifying the threat system typically results in incorrect counter-tactics often exacerbating the threat risk. With weapon fly out times measured in seconds, aircrew must be trained to immediately identify threat systems based on ASE indications and visual signatures presented.

They must instinctively select the proper tactics, techniques, and pro-

cedures (TTP) to prevent or mitigate weapons effects while keeping the aircraft safe from obstacles.

This consideration is not limited to the aircraft whose ASE detected and declared the threat. Since all aircraft in a flight formation operate with essentially the same tactical employment techniques, the instinctive reaction is required for all aircraft in the flight regardless of which aircraft was initially targeted.

Failure to employ this methodology may result in subsequent aircraft in the flight being targeted by threat systems. These tasks must be accomplished during an engagement scenario where there is little time to contemplate solutions.

Therefore, the training scenarios must be presented in as close to real-world engagement solutions as possible and include AMSO evaluation of the crew and collective responses.

### **Training Devices Designed to Enable Commanders**

The challenge for aviation commanders is to refocus a cohort of seasoned aviators, with over a decade of combat experience from counter-insurgency missions to a decisive action fight. The desired end-state will be to maximize the preservation of aviation combat power while providing the ground maneuver force capable and continued lethal air support and robust re-supply capability.

In order to achieve the desired end-state in a fiscally constrained environment, commanders must rely upon simulation and aircraft embedded threat emulation systems to create realistic training environments with peer and near-peer enemy force structure.

These systems must generate threat capability as close to real-world systems as possible.

The Aviation Combined Arms Tactical Trainer (AVCATT) was recently upgraded to integrate installed aircraft survivability systems, including hostile fire indicator (HFI).

Fielding this capability provides aviation commanders the ability to train HFI in simulation prior to first unit equipped with the actual system.

Threat system visual signatures were modeled with more realism making them usable to train aviators to accurately identify threat systems engaging them.

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identifying a man-portable air defense system (MANPAD) in a picture to how it actually looks when fired. Commanders can use these systems to ensure assigned aircrews are fully trained as individual crews and collectively. The after action review (AAR) capability supports a discussion based evaluation of crew and collective reaction of an ambushed "aerial convoy" or flight.

The Man-portable Aircraft Survivability Trainer (MAST) became a program of record in first quarter FY13.

With its fielding to the combat training centers, participating aviation units now have a system which interacts with installed Common Missile Warning System (CMWS), providing declaration to the aircrews and a visual signature for positive reinforcement of confidence in the system.

The MAST includes an adjudication capability emulating a more realistic probability of kill when CMWS is operational.

In the article titled *Combat Imperatives Help 101st CAB Flightcrews Accomplish Mission* found in the July-September 2013 issue of Aviation Digest, the authors discuss critical elements concerning combat losses.

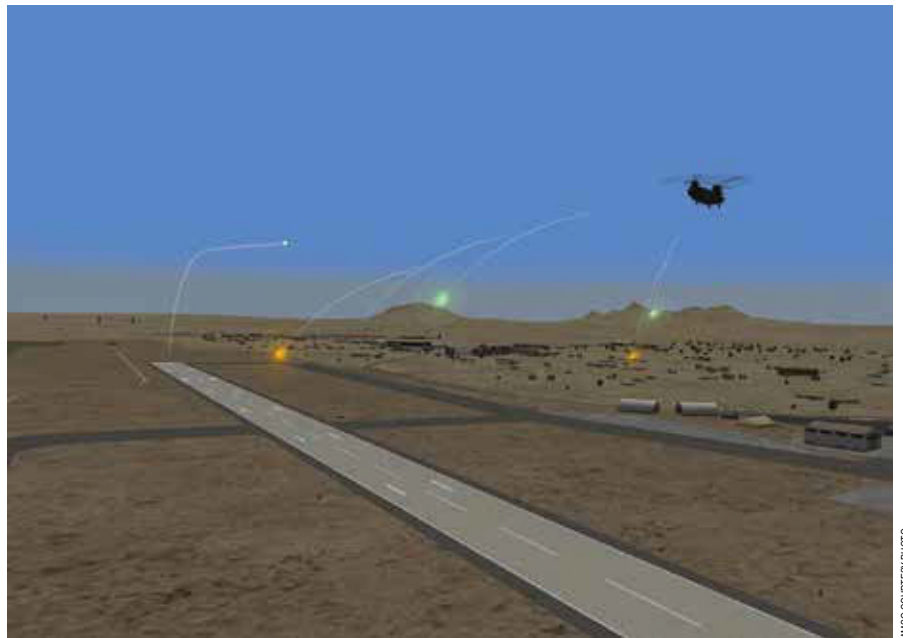
The factors presented are, in part, due to lack of routine application of evasive maneuver techniques during training flights at home station.

If the unit trains at a three to five rotor disk separation on all flights at home station, never building in maneuver room for the combat scenario, the potential to relearn these hard lessons will continue.

As aircraft advance with digital cockpit displays, bussed systems, integrated computer technology and government owned threat emulation software the technology exists to place aircrews in a simulated threat environment. These embedded devices would emulate threat systems and ASE responses through multi-function displays (MFDs) without having actual ASE systems installed. This threat environment would not require expensive emitters or personnel.

This capability will provide emulated threat in the real world, creating the most realistic flight training scenarios during every training flight.

This will provide commanders the ability to train against active threats programmed into the aircraft by the AMS officers.



An Aviation Combined Arms Tactical Trainer (AVCATT) screen shot of a missile engaging the CH-47D and the aircraft deploying countermeasures in the simulation.

Aircrew interaction with ASE during these events will emulate the real-world systems. Integration of this capability into the aerial gunnery program will provide realistic ASE declaration associated with the target assignments.

This survivability-lethality integration will enable crews to train with all systems providing accurate indications associated with target engagement scenarios.

Prior to the bussed aircraft solutions, this integrated training capability with currently available government owned material and software solutions was not possible on Army platforms.

### Achievable Goals

Albert Einstein stated: "We cannot solve our problems with the same thinking we used when we created them." Army Aviation's approach to resolving survivability requirements on tomorrow's battlefields falls within this description.

Shifting from the Aviation Tactical Operations Officer to the Aviation Mission Survivability program managed by the AMS Officer is the beginning of a complete solution.

In the 1992 after action review for Operations Desert Shield and Desert Storm, Army Aviation identified units that did not begin training for the threat in earnest until after they were

deployed. A little over two decades after Operation Desert Shield/Desert Storm, MAJ Jamie LaValley provided an article to the July-September 2013 Aviation Digest titled "A Hard Lesson Learned" where he discusses the requirement for additional threat based tactical flight training throughout the aviator's career. He later discusses weapons and tactics training, certification and instructor requirements.

A comprehensive tactics and threat training program established within each aviation unit will provide the environment necessary to inculcate aircrews with the instinctive skills to survive combat environments.

Establishing senior survivability officers as tactics evaluators through a training and certification process is essential to a long term solution.

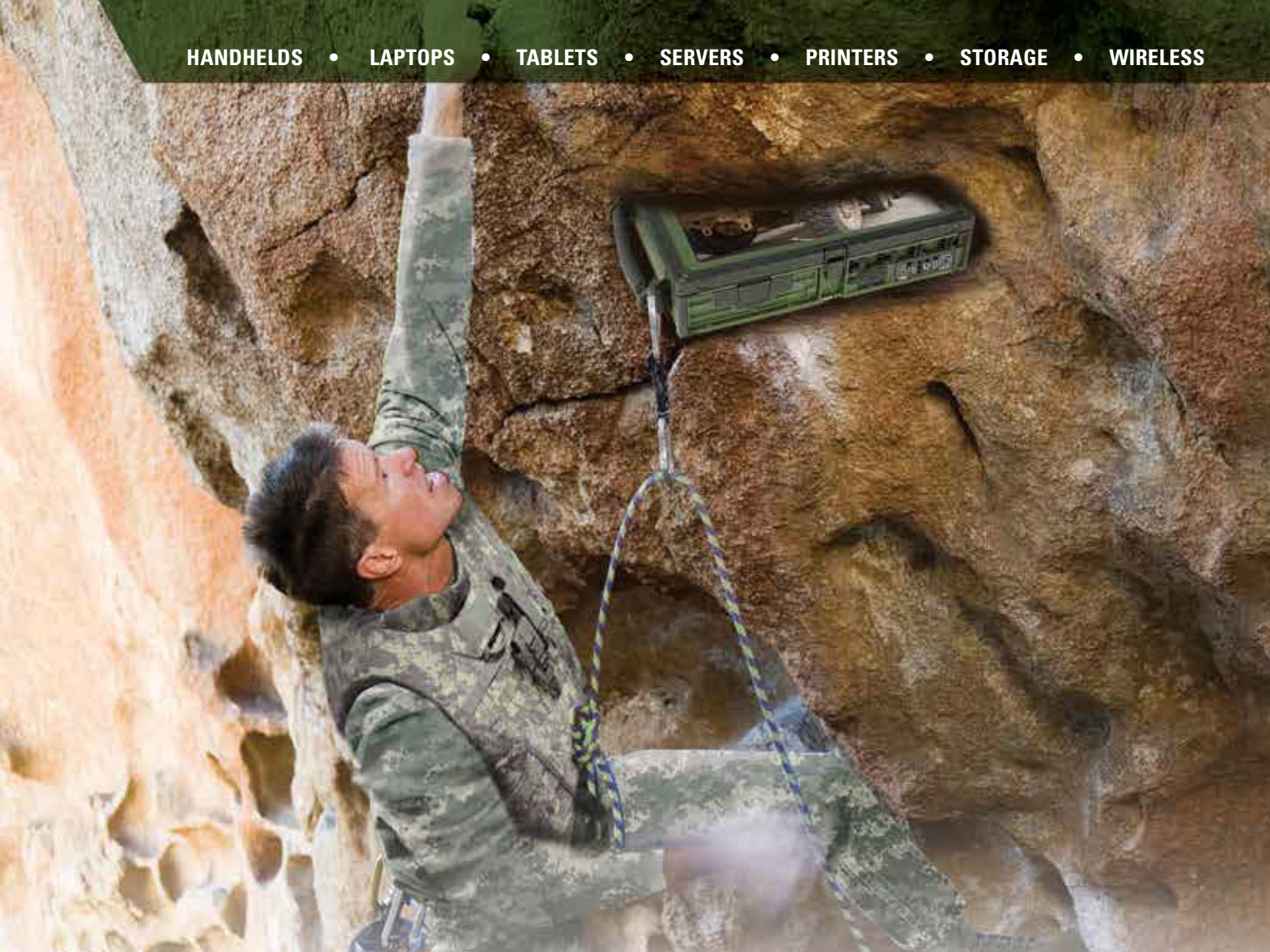
Clear measurement of crew and unit capabilities to engage in aviation operations in simulated combat environments will provide commanders a better gauge of their unit's combat effectiveness.

The preservation of aviation combat power is the focus of the aviation mission survivability program.



CW5 Michael S. Kelley is the Branch Aviation Mission Survivability Officer, assigned to the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.





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# Enhancing Combat Survivability

## Army Aviation Tactics Development

By CW5 Bobby C. Sebren



Security elements gathering items from a downed aircraft.

ASDAT COURTESY PHOTO

Since 2003, Army Aviation has developed a formal process for assessing combat damage and loss events. Initially the effort was a threat focused process by the Aircraft Shoot-Down Assessment Team (ASDAT).

The team assessed numerous aircraft damage and loss events, providing specific information on those events back to the aviation force. That shot-hit data is vitally important to tactical operators, and is what the team built its reputation on; but it is only one part of the story.

The information is used by the intelligence, acquisition, and test communities throughout the DoD. Within our aviation forces, it provides essential data on how enemy and friendly forces function, leading to the development of tactics, counter-tactics and doctrine. The dissemination of aviation combat forensic data across the boundaries of these disparate but collaborative communities is vital to improving the survivability of our aviation soldiers and platforms.

Collecting this data is important; but using this information to develop or modify tactics techniques and procedures (TTPs), and communicate this relevant and timely information is the team's core mission.

### ASDAT's Evolution

Beginning in 2003, the team's primary focus was threat identification.

Our most important customer was then, and remains, tactical units. The team was on the cutting edge of combat data collection but the mission focused on events that had already occurred. It was comparable to driving down the interstate looking in the rear-view mirror.

The information commanders and aircrew really needed was what could happen in the future. The relevance and requirements of ASDAT developed information then became two-fold: develop information a deployed unit could use the very next day, while at the same time providing tailored, pertinent information to units before they deployed.

While ASDAT continued to respond to the daily needs and requests of our deployed aviators, the challenge became taking the information collected in combat and getting it to individuals and units in training. This takes place in the professional military education (PME) courses at Fort Rucker, at aviation unit home stations, and at the combat training centers and Reserve Component training sites. This provides commanders and aviators the time to incorporate that information into tactical planning and development.

By 2007 the ASDAT transitioned from an ad hoc team to an organization with an HQDA approved personnel slate of six senior warrant officers (Aviation Combat Forensics Officers,

ACFO) and two DA civilians (DACs). This solidified the ASDAT as a permanent resource within the Aviation Branch.

During a combat damage or loss assessment, the team not only employs the tools of combat forensics in the individual incident but also looks for susceptibility and vulnerability trends.

To do this they must have a complete understanding of the threat systems used by an evolving enemy, the enemy itself, and the aircraft and aircraft survivability systems. As tactical operations officers (TACOPS) with at least battalion level combat experience, ACFOs have a substantial basis of Army Aviation knowledge. Additionally, they receive advanced survivability, assessment, and intelligence training prior to assignment to the team.

This training provides team members a solid foundation in these fields, enabling them to work closely with relevant intelligence organizations and the test and acquisition community. Collaboration with the intelligence centers quickly becomes second nature to team members and provides valuable information that ACFOs are then able to pass on to units both overseas and in CONUS.

Having a number of members from acquisition and testing organizations on the original ASDAT deployed in 2003 taught us the value of close cooperation with survivability system

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ASDAT COURTESY PHOTO

The layout of an aircraft under assessment.

developers. Working in concert with the TRADOC Program Office – Aviation Brigades (TPO-AB), the team has had the opportunity to provide recommendations for numerous material solutions, from infrared strobes that mitigate the risk of night multi-ship operations over urban terrain, to modifications of aircraft survivability system hardware and software.

### Training

ASDAT's team-developed material became part of every PME program from the Pre-Command Course to the Aviation Warrant Officer Advanced Course. These efforts, along with tailored programs for technical training courses throughout the Branch's officer education program, ensure that information from combat assessments and tactics development is imbedded in and relevant to these programs.

In order to optimize Army Aviation knowledge management the next step was to address unit training during pre-deployment. A robust schedule of unit assistance visits and participation pre-deployment training makes certain ASDAT information reaches all deploying units.

This multi-faceted approach guarantees that the most relevant and timely information is provided to individual professionals and units during all phases of their deployment cycle, as well as to the institutional training communities that support them.

As part of Doctrine Division of the Directorate of Training and Doctrine (DOTD), U.S. Army Aviation Center of Excellence (USAACE), the team works closely with the Branch Aviation Mission Survivability Officer and Lessons Learned Integration cell for the collection, analysis and dissemination of TTPs, aircraft survivability equip-

ment (ASE) training strategies, and lessons learned to our aviation force.

The ASDAT's full-spectrum exposure to and communication with aviation units and intelligence organizations provides Doctrine Division with timely combat data, threat and survivability analysis, and a method to deliver vetted products to a wide number of organizations and programs.

This is one of the enablers for the DOTD to guarantee that the best practices, training products, and survivability information reaches our aviation force as soon as possible.

### The Way Ahead

While the team is best known for our combat forensics mission, that is just one part of the mission set. The development of effective tactics and counter-tactics, and ensuring those are part of the Branch's doctrine is just as important as the team's combat assessment tasks. As the team matured, it became clear that collecting combat damage data was an enabler, translating that data into products for the operational force was the center of gravity.

A natural extension of those efforts was giving the team primary responsibility for the development of Army Aviation's first classified tactics manual, ATP 3-04.17. The "dot-seventeen" is a collaborative effort of the offices within Doctrine Division and other organizations across the Aviation Enterprise. The goal, synchronized with the Army's Doctrine 2015 efforts, is to provide the Branch with a classified tactics manual that addresses threat systems, survivability equipment capabilities, and tactics/counter-tactics, from an Army Aviation perspective.

The team's evolution drove another action which was to change the team's designation to better reflect its actu-

al mission. The Aircraft Shoot-Down Assessment Team is now the Aviation Survivability Development And Tactics Team. This re-branding keeps the signature ASDAT acronym but better describes the day to day efforts of the officers and civilians assigned to the team.

This will not end the ASDAT's efforts to improve combat data collection. The combat data collection processes refined over a decade of combat operations by ASDAT and the other components of the Joint Combat Assessment Team (JCAT) have led to numerous material and non-material improvements that directly improve aircraft survivability.

The Under Secretary of Defense for Acquisition, Technology and Logistics (AT&L) has directed a Department of Defense (DoD) wide look at aviation combat damage data collection. This initiative drove an Air Combat Damage Reporting (ACDR) demonstration effort that examined methods to streamline reporting and data collection.

The goal is development of DoD wide guidance and standards for combat data collection. Army Aviation platforms are over six times more survivable than aircraft flown during the Southeast Asia Conflict because combat data collected during that conflict was applied to the design of our current platforms. The ASDAT and the JCAT personnel currently imbedded in our OEF based formations will continue to ensure this vital data is available to combat developers.

ASDAT's unique HQDA-directed mission puts the Team at the juncture of the operational, training, intelligence and acquisition communities.

The ability to operate across this organizational spectrum and identify key data points that assist these communities in providing timely solutions for the warfighter enhances the overall survivability of our aviation force.

Validation of the team's mission, expertise and products lies in the continued mission success of Army Aviation units and progressive improvement of the tactical and material solutions which increase crew and platform survivability.



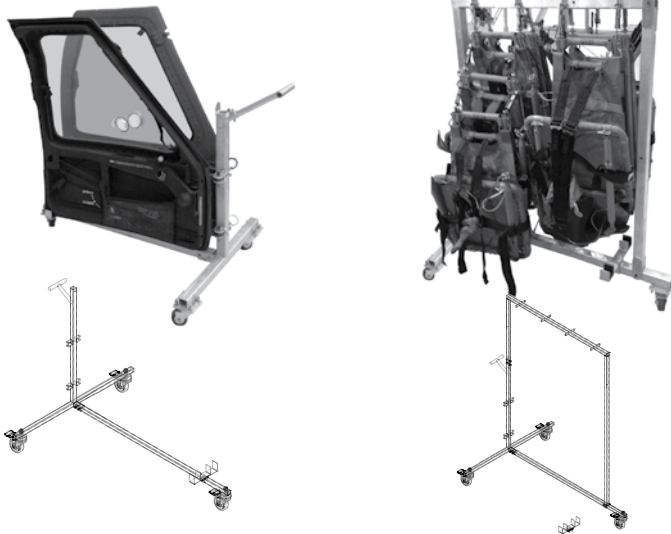
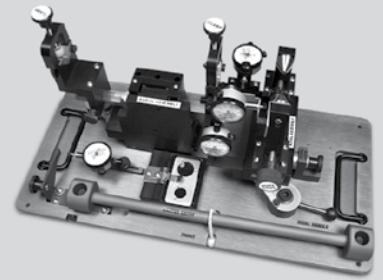
*CW5 Bobby C. Sebren is the chief of the Aviation Survivability Development and Tactics Team, headquartered at the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.*

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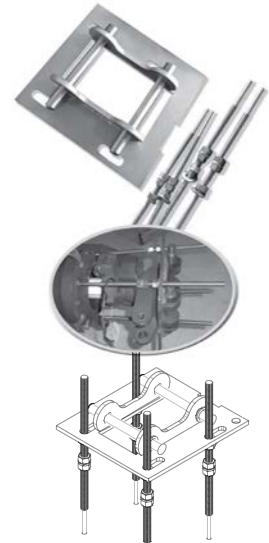


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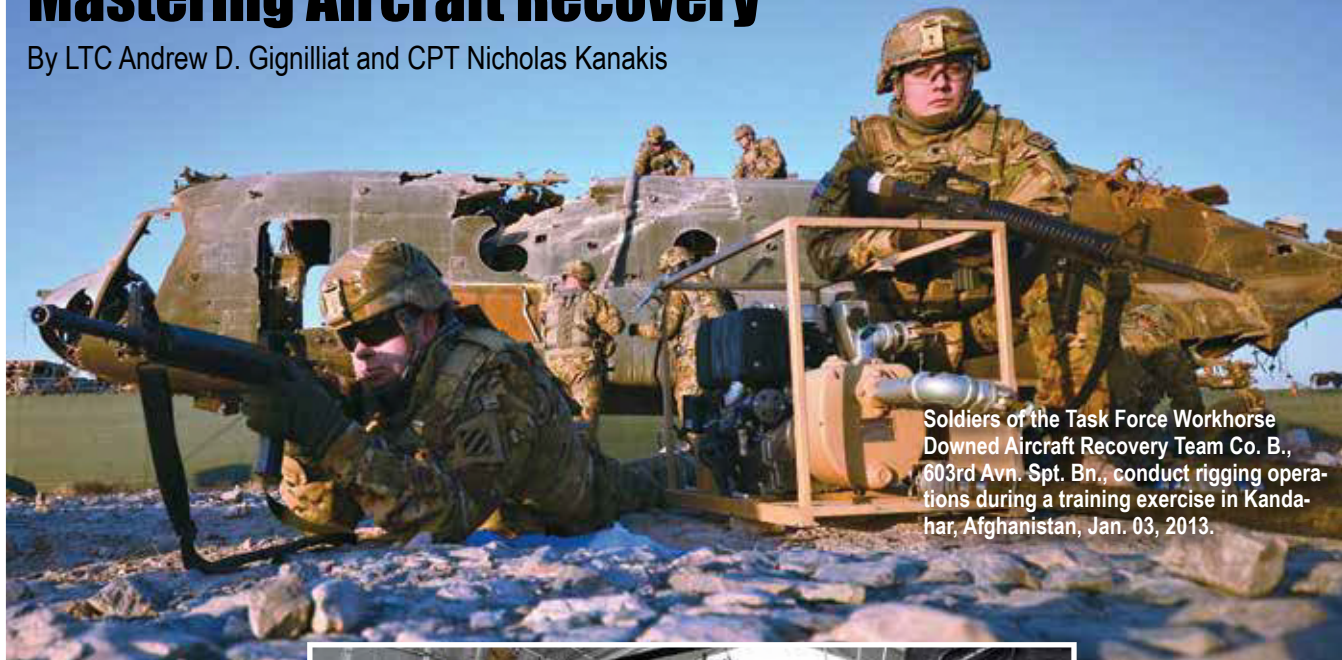
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# Task Force Workhorse – Mastering Aircraft Recovery

By LTC Andrew D. Gignilliat and CPT Nicholas Kanakis



Soldiers of the Task Force Workhorse Downed Aircraft Recovery Team Co. B., 603rd Avn. Spt. Bn., conduct rigging operations during a training exercise in Kandahar, Afghanistan, Jan. 03, 2013.

U.S. ARMY PHOTO BY SPC JAMES WITTE

**O**n January 2, 2013, the 603rd Aviation Support Battalion “Workhorse” assumed the Downed Aircraft Recovery Team (DART) mission across all of Regional Command (RC) South in Afghanistan.

Prior to deployment, the battalion set out to establish 3rd Combat Aviation Brigade’s (CAB) premier recovery team and did so by deliberately implementing a plan which staffed, equipped, trained, and eventually facilitated real-world aircraft recoveries.

Since that time, the 603rd DART successfully executed six aircraft recoveries to include the simultaneous sling-load recovery of a Black Hawk and Kiowa Warrior separated by over 115 miles of rugged Afghan terrain.

In addition to providing support to 3rd CAB, the Task Force (TF) Workhorse team demonstrated its joint capabilities by pairing with contractor, USAF and 160th Special Operations Aviation Regiment (Airborne) (SOAR(A)) teams to support recovery of unmanned aircraft systems (UAS), fixed wing, Mi-8, OH-



U.S. ARMY PHOTO BY SPC JAMES WITTE

Co. B, 603rd ASB., 3rd CAB Soldiers following the successful recovery of a UH-60L within Uruzgan Province, Afghanistan on Jun 12, 2013.

58, and UH-60L aircraft.

TF Workhorse DART consists of 44 Soldiers capable of executing aircraft recoveries under day, night, night-vision goggle (NVG) and inclement weather conditions.

## Manning

The Workhorse DART training program began in earnest in August of 2011 through various individual and company level training exercises. Skill sets were initially tested during a field training exercise (FTX) in February 2012, where battalion leadership identified numerous short-falls in team training, staff reaction, and resourcing.

The first step was the reevaluation

of team leadership. In March of 2012, CW5 Scott Reagan, an Apache Maintenance Test Pilot and the CAB’s Maintenance Examiner, assumed his duties as DART 06.

CW5 Reagan, along with his NCOIC, SSG Marc Scialdo, understood that although many variables contribute to the success or failure of any team, the greatest remains the

talent and coach-ability of its members. With that in mind, he reassessed the team’s composition based upon required skill-set, individual MOS / technical proficiency, Soldier trainability and physical fitness.

Rather than select only a few individuals, CW5 Reagan developed a team which incorporated over 40 Soldiers with varied expertise including aircraft mechanics, component repair experts, avionics repairmen, aircraft defuelers, medics and communication specialists. With such a large compliment of Soldiers, the Workhorse DART built teams for each of the Army’s airframes capable of ensuring 24/7 redundancy. This included the se-

lection of an alternate OIC and NCOIC, four individual team leaders and the continuous cross training among all team members.

## Training

After reorganization, CW5 Reagan and SSG Scialdo developed a methodical training plan which focused on individual skill-sets, team operations, and battle drill execution.

Soldier training included Combat Life Saver (CLS); NVG driver's training; Battle Damage Aircraft Repair (BDAR); Unit Maintenance Aerial Recovery Kit (UMARK); extensive basic rifle marksmanship and qualification on M-4, M-16, M-249, and M-240B weapons systems; recovery equipment familiarity (Spider crane, chop-saw, Jaws of Life, etc.); small unit leader tactics; land navigation; and communication training on multiple radio systems.

Training continued at the collective level during the DART Situational Training Exercises (STX) at the Joint Readiness Training Center in May 2012 and a company DART training exercise in June 2012. Soldiers demonstrated mastery of individual tasks and trained as small teams to establish duties during recovery operations.

Simultaneously, the Workhorse staff collaborated with CW5 Reagan to develop a streamlined battle drill capable of providing necessary information to the team in the event of a DART scenario.

The DART tested the product of these brain-storming sessions during the CAB FTX, "Falcon Focus," with elements from 1-3rd Attack Helicopter Battalion and 2-3rd General Support Aviation Battalion.

During "Falcon Focus," two of the battalion's four teams trained to the highest levels of proficiency completing full rigs on both UH-60 Black Hawk and AH-64 Apache helicopters in less than 15 minutes through repetitive team battle drills.

Over time, small refinements to products, briefs, information flow and staff action sequencing helped polish a concise DART battle drill adopted into the 3rd CAB standard operating procedures (SOP).

Ultimately, the TF Workhorse team assumed ownership of the DART mission throughout all of RC-S based upon demonstrated proficiency at team, staff, and command levels.

## Execution

The countless variables, complexity and emotional urgency associated with a downed aircraft recovery require a deliberate and sequential approach to successfully execute such a complex mission.

This was most apparent during the team's first recovery on March 11, 2013 when a UH-60L, "Black Hat 14," crashed just outside of Kandahar Airfield with SSG Scialdo, the DART NCOIC, aboard as a crewmember.

As key battle staff and team leadership moved to 3rd Squadron, 17th Cavalry Regiment's Task Force Tactical Operation Center (TOC) to receive a mission update, the remaining team members finalized pre-combat checks and inspections of their gear.

SSG Ronald Latour, the team's alternate NCOIC and technical inspector, deployed to the DART objective with the ground security force as one of the first Soldiers on the scene.

While there, he provided critical aircraft damage assessments to the TOC and selflessly assisted with the recovery of our CAB's Heroes and their sensitive items.

Despite the emotional loss of their NCOIC, SSG Scialdo's DART accomplished their duties in a manner that would exemplify his professionalism and honor his memory.

Although the team conducted five additional aircraft recoveries since this event, the loss of the "Black Hat 14" crew and SSG Scialdo will remain TF Workhorse's most somber and humbling experience.

The truest test of any organization is its ability to perform at peak output and successfully accomplish the mission regardless of the circumstances.

On July 11, 2013, the DART did just that by concurrently recovering both a downed OH-58D Kiowa Warrior and UH-60L Black Hawk within a 17-hour timeframe.

Just two hours after launching the first team to the mountainous terrain of Uruzgan, Afghanistan to recover the UH-60L, the Workhorse TOC received a call for assistance with the recovery of an OH-58D in the Horn of Panjwai approximately 115 miles southwest inside a hostile, urban desert environment.

Thanks to extensive cross training of personnel, prepositioning of equipment and in-depth battle drills, a second DART capability organized under



CW5 Scott Reagan (right), the Workhorse DART OIC, and SSG Marc Scialdo, NCOIC, discuss communications prior to a training exercise in Kandahar, Afghanistan, Feb 2013.

the leadership of CPT David Daniels and was subsequently supported by aircraft from the 160th SOAR(A), ground force security from 3-17th Cav., and elements of a special operations task force.

Despite the persistence of "red illumination" conditions, CPT Daniels' team successfully removed all major components and rigged the heavily damaged OH-58D for a safe and expedient sling load recovery, denying the enemy any potential propaganda opportunities.

Less than 2 hours later, the first team led by CW2 Christopher Stevens successfully recovered the UH-60L from an isolated 9,045 foot mountain ridgeline with the help of the "Vertical T" Mi-26 heavy lift helicopter.

## Conclusion

Despite hard won lessons and bitter losses, the TF Workhorse DART is exceptionally proud of the accomplishments born from the mentorship of strong leaders, deliberate training and technical excellence.

While they are proud of their accomplishments, their legacy will be one of teamwork, camaraderie and professional dedication to their fellow Soldiers; a legacy repeated throughout the course of our Nation's history.

❖❖  
*LTC Andrew D. Gignilliat is the Commander of the 603rd Aviation Support Battalion and CPT Nicholas Kanakis is the battalion Assistant Operations Officer. Both are assigned to Hunter Army Airfield, GA.*



# Wings of Destiny Ball

By CPT Christina M. Wright

**T**he 101st Combat Aviation Brigade completed their latest deployment in support of Operation Enduring Freedom in May 2013. The Wings of Destiny celebrated their return home with family and friends during the brigade ball on July 18, 2013 at the Gaylord Opryland Hotel and Convention Center in Nashville, TN.



U.S. ARMY PHOTO BY SGT DUNCAN BRENNAN, 101ST CAB PUBLIC AFFAIRS

CSM Galu P. Satele, left, and LTC Joel K. Aoki, right, commander, 6th Battalion, 101st Combat Aviation Brigade, toast a successful deployment at the Wings of Destiny Ball.



Unit ministry teams from the 101st Combat Aviation Brigade pose for a picture during the Wings of Destiny Ball.



COL Paul Bontrager, left, commander, and CSM Stuart C. O'Black, right, prepare to add champagne to the grog in recognition of a momentous deployment for the 101st CAB during a ceremony at the Wings of Destiny Ball.



CPT Jill M. Rahon, commander, Company B, 6th Battalion, 101st Combat Aviation Brigade, poses with Master Tech Sgt. Cliff R. Reeder, U.S. Marine Corps, retired, a WW II veteran, at the 101st CAB, Wings of Destiny Ball.





MG Kevin W. Mangum, commander, U.S. Army Aviation Center of Excellence (USAACE), provides the keynote address at the 101st Combat Aviation Brigade, Wings of Destiny Ball.



Above: COL Paul Bontrager, left, commander, 101st CAB, prepares to present MG Mangum with a memento at the Wings of Destiny Ball.



MG Mangum, accepts a personalized rocking chair from COL Bontrager for outstanding support of the 101st CAB during the Wings of Destiny Ball.

Right: COL Paul Bontrager, left, commander, 101st Cbt. Avn. Bde., inducts David Bowering, documentary film maker, into the Honorable Order of Saint Michael at the Wings of Destiny Ball. Bowering was honored for his efforts to showcase the bravery of the Soldiers of Company C, 6th Bn., 101st CAB, Shadow DUSTOFF, during their most recent deployment to Afghanistan.

*CPT Christina M. Wright is the public affairs officer for the 101st Combat Aviation Brigade, 101st Airborne Division (Air Assault) at Fort Campbell, KY.*



# THE DISTINGUISHED FLYING CROSS SOCIETY



## Preserving the Heritage

By COL J. Bruce Huffman, Retired

**T**he Distinguished Flying Cross (DFC) is our nation's highest award for aerial achievement.

As a valor decoration, it ranks fourth in order of precedence, and is awarded to recipients for heroism or extraordinary achievement while participating in aerial flight.

The DFC has been awarded to pilots and air crew in all five of our services (United States Army, United States Navy, United States Marine Corps, United States Air Force and the United States Coast Guard). Recipients represent a diversity of backgrounds, ethnicity, rank and gender whose aerial achievements were chronicled from the chaos of combat, to epic rescues, out to the very edges of space.

The DFC was established by an Act of Congress on July 2, 1926 to recognize the heroism of World War I pilots.

The first DFC citations were presented to the Pan American Good Will Flight crews on 2 May, 1927 by President Calvin Coolidge, for their five-ship, 22,000 mile flight.

President Coolidge presented the first DFC medal, on 11 June, 1927, to then Captain Charles A. Lindbergh of the Army Air Corps Reserve, for his solo flight of 33 ½ hours and 3,600 statute miles; beginning from Long Island, NY and landing in Paris, France.

Lindbergh, the 'Lone Eagle,' is a legacy member of The Distinguished Flying Cross Society.

The Distinguished Flying Cross Society itself (DFCS) was founded in 1994, as a 501(c)(19) nonprofit organization, headquartered in San Diego, CA, and is made up of those men and women who were awarded the Distinguished Flying Cross and their relatives. The Society currently has more than 6,000 members and was found-

ed on the fraternity and fellowship among military fliers.

It seeks to preserve the rich heritage and historical narratives of those who are recipients of the DFC and to educate the general public, especially the youth of America, on the values of courage, patriotism and character; those very characteristics upon which America was founded. By doing so, it elevates the awareness of the award itself and demonstrates to the public that a very small cross section of ordinary Americans can and have accomplished extraordinary things under extremely difficult conditions while in flight.

The DFCS recently published "On Heroic Wings: Stories of the Distinguished Flying Cross," with the Foreword written by President George H. W. Bush and the Introduction written by Captain Jim Lovell; both recipients and members.

The book is based on oral history accounts, DFC citations and other associated primary source documentation. Visual images gathered from personal collections and archives illuminate the comprehensive content of this volume. While the acquisition of the factual data was essential, capturing the personal feelings and perspectives of American aviation heroes added to the richness of the publication.

*Editor's Note: A review of this book is located on page 57 of this issue of ARMY AVIATION.*

The DFCS is also moving forward to produce a syndicated film documentary on the Distinguished Flying Cross that will honor the legacy of the award as well that of its recipients.

The Character Development Program (CDP), produced by the Medal of Honor Foundation as an educational outreach, has recently been recog-

nized by the DFCS as an extremely worthy cause and efforts are underway to lend the support of our membership toward that effort. An active scholarship program also exists for the descendents of DFCS members.

The Distinguished Flying Cross Society recognizes the strong historical connection between its origins and those of Army Aviation.

The DFCS looks toward the ranks of the Army Aviation Association of America and those members who are recipients of the Distinguished Flying Cross to join with them in the preservation of their personal histories and to assist us in furthering our educational goals.

We are making a special appeal to the current generation of heroes who have served since the first Gulf War as well as all others who may have been awarded the DFC.

As Kenny Chesney said in his 2007 hit 'Don't Blink,' "Trust me, friend, a hundred years goes faster than you think; so don't blink," act today!

If you are a DFC recipient and would like to see the historical narrative of your award preserved to serve as an inspiration for future generations, go to the DFCS website at [www.dfcsociety.org](http://www.dfcsociety.org) for information and requirements for joining our ranks.

Families of a deceased DFC recipient are also encouraged to enroll their loved one and become an Associate member.

For additional information, call our toll-free number at 1-866-332-6332.



*COL (Ret.) J. Bruce Huffman is a retired Master Army Aviator and a director of the Distinguished Flying Cross Society.*



# ALSERP

By Dr. (LTC) Joseph Puskar

### **Q: What is the U.S. Army's aviation life-saving equipment recovery program (ALSERP) all about?**

**FS** – The following is taken from the U.S. Army Aeromedical Research Lab (USAARL) official mission statement for the ALSERP program:

“The primary objectives of the aviation life support equipment retrieval program (ALSERP) are: (a) to determine why aviation mishap occupant injuries were or were not incurred and (b) to develop concepts and criteria for design improvements through the analysis of injuries and their correlation to retrieved aviation life support equipment (ALSE).”

Two ultimate goals of the ALSERP are to maintain and increase the level of protection during aircraft mishaps by collating and presenting clear injury and equipment failure data and trends to substantiate design improvements, and the exploration of design alternative concepts for the mitigation and reduction of crash induced injury.”

As originally conceptualized, the composition of an ALSERP inspection team was intended to be a critical element in validating the outcome of case deliberations (USAARL policy 95-55, Appendix B), and comprised of personnel selected from the disciplines of ALSE, medicine, engineering, aviation, and safety.

“Although fundamentally sound in concept, as with many other programs, limitations in availability of qualified personnel, funding constraints, and other more urgent priorities evolving from over a decade of continuous combat operations have prevented the ALSERP program from developing into what was hoped for by the researchers who pioneered the original concept,” said COL Mark Adams, a British Army exchange pilot-physician who leads the ALSERP team at USAARL.

“In order to achieve the program’s

stated goals, and to continue to make incremental improvements in our ALSE kit, we also need to encourage a much higher participation rate in the program than we are seeing at the present time.” said COL Adams. The lab does not desire ALSE retrieval if the mishap was determined to be non-survivable and there were no survivors.

Gear that they are interested in evaluating include any ALSE that contributed to or caused injury, any ALSE that restricted or hindered egress, all ALSE associated with post-crash fires, and restraint system component failures to include the belt, harness, buckle, or inertial reel. Also requested are all available restraint system components when upper torso and flail injuries are incurred by the crew, and all unserviceable items of personal restraint. Crashworthy seats should be shipped separately from other ALSE after coordination with ALSERP/USAARL personnel due to long delays experienced in their packing and shipping.

Seats of particular interest include those that stroked, or that failed to stroke due to an obstruction, or any seat that in the experience of the investigator should have stroked, but failed to do so.

Seats that show any evidence of distortion, damage or corrosion, or when the occupant suffered a spinal injury or other significant injury such as a leg bone or hip fracture should be sent in. ALSE that performed as designed such as a helmet visor that impacted a cyclic control and prevented an injury is also of interest to the lab.

Successes of the program have resulted from a systematic, logical correlation of injuries incurred in mishaps with ALSE successes and failures to prevent them. These include improvements in crashworthy seating, aircraft/airframe crashworthiness, improved helmets, human anthropometric design improvements for optimized performance and survivability, and iner-

tial reel and restraint system upgrades.

Frangibility of aircraft structure and associated mechanical insults to the crew are included in the systems-based approach to cockpit design considering accurate health hazard identification from previous mishaps.

Helmet design improvements of the shell material and design, liner, visor, chinstrap and nape strap, energy-attenuating ear cups, and the development of a helmet retention system for some models have dramatically reduced the impact forces transmitted to the head and brain in most crash sequences compared to older flight helmets. A new monorail gravity drop tower is being built at Fort Rucker to continue research in helmet design improvements.

Regulations that cover the ALSERP investigations, and that require equipment evaluation after a mishap involving an injury are: DA Pamphlet 385-40, Army Accident Investigative reporting, paragraph 2-4 h., AR 40-21, AR 95-1, AR 340-17, and see also AR 385-10 for some useful guidelines.

COL Adams and his team at USAARL ask that mishap investigation teams and unit ALSE shops send any ALSE gear that appears to have failed or been damaged, and particularly that resulted in an aircrew injury to USAARL (ATTN:ALSERP), 6901 Farrel Road, Fort Rucker, AL, 36362-0577. DSN 558-6815/6870 or COM 334-255-6815/6870.

According to the U.S. Army Combat Readiness Center’s surgeon, COL Mark McPherson, “We can, and we should, but we’re not doing this (consistent ALSERP studies). If we want to save lives and prevent injuries we must return to the earlier, 1990s-era level of interest and emphasis on research in this area that is critical to aircrew survival.”

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*



# A Look at Our Scholarship Applicants and Previous Winners

By Catherine C. Roache

The AAAA Scholarship Foundation congratulates our 2013 AAAA Recipients! The hard work and dedication of the students who applied for scholarships is evident in their applications, GPA's, and the volunteer, extracurricular efforts of these outstanding aviation community members.

Applications show a diverse and exciting group of students studying veterinary science, music, literature, engineering, finance and medical, to name a few. We have students who work full time while in school; student athletes; and those who volunteer for Habitat for Humanity, missionary service and tutoring. The list goes on and on.

We are constantly amazed as we review the applications in the chosen fields of study and the enormous workload these outstanding students are committed to.

There are five qualifying categories for eligibility to apply for an AAAA-SFI Scholarship: member, spouse, child, sibling and grandchild. As we celebrate their success and the 50th Anniversary of the Scholarship Foundation, we laud our scholarship recipients over the past 50 years and would like to share their inspiring stories.

Jackie Gordon, a 2011 scholarship recipient, and AAAA Old Tucson Chapter member has graciously shared her scholarship success story.

Jackie is a typical example of an AAAA member scholarship recipient – she aimed high, set her goals and realized her dreams.

Equally impressive, is her dedication to our AAAA professional organization. She is an active member of her chapter, serving as an officer, complementing her professional life as a business owner in the field of aviation. Here's Jackie's story in her own words.

*"I received an AAAA Scholarship sponsored by Robertson Fuel Systems two years ago. I was a stay-at-home mother while my girls were growing up. After my youngest daughter started middle school, I got a job as an administrative assistant at an aviation engineering firm. This is when I joined AAAA.*

*After my youngest daughter graduated high school, she joined the Army; she is an Apache crew chief currently stationed in Korea. I decided to go back to school with the goal of graduating with a BS in Business Management before my 50th birthday. I achieved my goal when I received my degree six months ahead of my schedule! I have recently started my own business providing FAA certification management for general aviation.*

*I am the Vice President of Membership for the Old Tucson Chapter and the Vice President of Blue Star Mothers of America AZ. Both of my daughters are engaged to Army Aviators and I am very proud to be associated with such a wonderful group of professionals."*

It is extremely gratifying to read the many thank you letters from the Foundation's recipients. As a volunteer I feel proud that I have assisted in some small way. Some excerpts of this year's letters include: "I promise you to remain a contributing member of AAAA..." and "It fills me with joy to write you with my thanks. I will take this reward respectfully and strive myself to better my grades and work ethic in order to maintain my relationship with the AAAA Foundation."

And from a parent: "We cannot thank you enough for this generous gift. It was proof to our son that hard work does pay off; he wouldn't really have been able to attend without this."

The AAAA Scholarship Foundation program is one of our association's most valuable assets for our mem-



AAAA OLD TUCSON CHAPTER COURTESY PHOTO

**Scholarship recipient, Jackie Gordon (left) and her husband, Tom, welcome their daughter, SPC Stephanie Gordon, home from her deployment to Iraq on Oct. 11, 2009 at Hunter Army Airfield, GA. She is presently assigned to Co. B, 4th Bn., 2nd Avn. Regt., Camp Humphreys, Republic of Korea.**

bership. Although we cannot award a scholarship to each and every applicant, the Foundation strives throughout the year to increase the award levels of current scholarships as well as increase the number of scholarships awarded.

There are four types of scholarship categories managed by the AAAASFI:

- Chapter
- Corporate
- Heritage
- Individual

If you would like to discuss how your chapter, company or you as an individual can start up an AAAA Scholarship, please contact your chapter VP Scholarships or one of the Board of Governors of the Scholarship Foundation. Our dedicated AAAASFI Team is here for you!

*Catherine C. "Kit" Roache is the chairwoman of AAAASFI Board of Governors Publicity Committee and secretary of the Mid-Atlantic Chapter.*

# ACHIEVE WITH HONOR SUCCEED THROUGH EDUCATION

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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 [www.quad-a.org](http://www.quad-a.org)



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# The Southern California Chapter

By LTC (Ret.) Jan S. Drabczuk

*I appreciate the support from LTC (Ret.) John Hendrickson, the Southern California Chapter President and LTC (Ret.) Tom Lasser chapter Senior Vice President for providing and sharing this information to our membership.*

Several years ago, California had up to seven AAAA chapters. Due to base closures, realignments, and a lot of the aerospace industry moving to other states, the Army Aviation Association of America is now down to two chapters in the Golden State. They are the High Desert Chapter located at the National Training Center, Fort Irwin and the Southern California Chapter.

### History and Membership

The Southern California Chapter has been in existence since the early '60s. The Chapter, primarily in the Los Angeles and Orange County areas, extends from Vandenberg Air Force Base in the North down to San Diego, and out to the Inland Empire of Riverside and Palm Springs.

A vast, spread out geographical area that presents a membership challenge and more importantly, difficulty in gathering members for meetings and events. The Chapter was originally formed around the vast aerospace industry and defense companies prominent in the southern part of California. This core audience still constitutes the majority of the membership and is a vital part of the organization.

Current Southern California chapter members include those in the aerospace and defense industry, retired military, Guard and Reserve aviation personnel, and those who the chapter calls 'Friends of Army Aviation.'

### Supported Units

The center of gravity of Army Aviation in Southern California is the avi-



Los Alamitos Army Airfield Tower, California

ation units located at Los Alamitos Army Airfield (KSLI). "Los Al" is a former Naval Air Station that the California National Guard has been operating since the early parts of the '70s.

Current flying units stationed at Los Al include the 1st Battalion, 140th Aviation Regiment and Company B (AVIM) of the 640th Avn. Spt. Bn. Both of these units are under the Guard's 40th Combat Aviation Brigade.

6th Bn., 52nd Avn. Regt., The Flying Dragons from the Army Reserves, the most recent recipient of the AAAA Fixed Wing Unit of the Year award, call Los Al home. As does Company A, 7th Bn., 158th Avn. Regt., a USAR Black Hawk unit. There currently are no chapters in the northern part of California although California guard aviation units are stationed in the cities of Fresno, Stockton and Sacramento.

The Chapter helps these guard units out with awards and recognitions such as the Order of Saint Michael and Order of Our Lady of Loreto awards.

### Chapter Reorganization and Planned Activities

The Chapter had rejuvenation in the early 1990's when the late COL (Ret.)

Jake Benjamin gathered the troops at Los Alamitos and made things happen. Southern California had a larger contingent of guard and reserve aviation units during that time and industry participation was a very significant contributor, providing man power, ideas and financial support. Jake passed away early this year and the Chapter subsequently began some reorganization and establishing new priorities for AAAA in Southern California.

With new leadership, the Chapter is starting a membership drive, led by VP Membership – Mike Letson, and Senior VP LTC (Ret.) Tom Lasser, focusing on the Los Al aviation units.

The new Chapter president, LTC (Ret.) John Hendrickson, is actively pursuing new directions. This includes recruiting new board members, fundraising activities, holding quarterly meetings, and seeking participation and support from the defense and aerospace companies in the area.

Working closely with the Southern California Vietnam Helicopter Pilots Association, VHPA, it is envisioned that a number of "joint" professional meetings will be held. Another meeting approach for this year will be the

October 27th (quarterly) general membership meeting to be held at the end of the “Wings Wheels & Rotors Expo” on Los Alamitos Army Airfield. Sponsored by the Joint Forces Training Base and the Los Alamitos Chamber of Commerce, “Wings Wheels & Rotors” is a fund raising event benefiting the Morale Welfare and Recreation fund for military at the Los Alamitos Joint Forces Training Base.

It features helicopters, airplanes (and rides), hot rods and motorcycles. Both the Southern California Chapter as well as the VHPA will have booths there, inviting perspective members to find out what these associations are all about.

Plans and coordination are being made for an active scholarship program, reconstitution of Soldier of the Quarter/Year and Aviator of the Year awards, and other initiatives such as a Chapter website and new email address.

### Summary

Each of our 70 AAAA chapters is unique. Some are well established with core active duty supported units; others are very diverse and spread out across a large geographical area.

Army Aviation is alive in Southern California – Southern California is on its way. More work to be done but good things are happening...Surf's Up!

Feel free to contact me if you need help for your chapter, executive board support, or to obtain clarification of National procedures at [jan.drabczuk@quad-a.org](mailto:jan.drabczuk@quad-a.org). I look forward to working with you and supporting AAAA.

❖❖

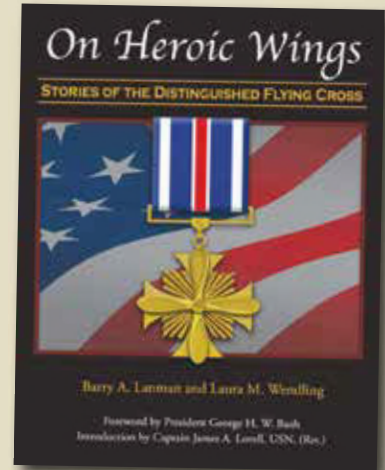
*LTC (Ret.) Jan S. Drabczuk*  
AAAA VP for Chapter Affairs

## BOOK REVIEW

### On Heroic Wings: Stories of the Distinguished Flying Cross

By *Barry A. Lanman, PhD.*  
and *Laura M. Wendling, PhD.*

Reviewed by *CW5 David F. Cooper,*  
*U.S. Army, Retired*



This is the definitive work on the origin, development and lineage of the Distinguished Flying Cross and the oral histories of the aviators who are its recipients.

The first chapter of this well researched and chronicled book allows the reader to delve into the history of the DFC. For example, the first DFC recipients only received a citation – the DFC medal had not yet been approved! The following chapters represent the conflicts in our nation's history. While not every DFC citation or recipient is included in the book, the authors do a masterful job including a sampling of representative stories from the separate conflicts. Additionally, recipient's stories from all five branches of service are included.

These are first person accounts of aerial combat and rescues under the most demanding of circumstances. The narratives cover the gamut from air-to-air combat to close air support to space flight. The reader will quickly find themselves caught up in the action of each story. The book records notables who were awarded the DFC to include a former president, astronauts, actors, and even a grandfather and his grandson. It even chronicles the events of a former Kamikaze pilot who went on to earn the DFC.

*On Heroic Wings: Stories of the Distinguished Flying Cross* is an excellent read with a beautifully decorated jacket that makes it an ideal coffee table book that you'll have actually read.

*CW5 (Ret.) David F. Cooper is a former Master Army Aviator who served as the first Command Chief Warrant Officer of the U.S. Army Special Operations Aviation Command; is an inductee and trustee of the Army Aviation Hall of Fame; and is presently serving as the Army Aviation Association of America National Vice President for Membership.*

## Photo Contest - Calling for Entries!



Winning entries will be published in the 2014-2015 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.



## The Membership Corner

By CW5 (Ret.) David F. Cooper

I was lucky enough to write a review of the book *On Heroic Wings: Stories of the Distinguished Flying Cross* by Barry A. Lanman, PhD. and Laura M. Wendling, PhD. The review is on page 57 in this issue of *ARMY AVIATION* – it is a wonderful book, suitable for any coffee table and the proceeds go to a great cause. While reviewing the book I thought about other heroic aviation stories I’ve heard over the years. Many started with the famous quote, “No kidding, there I was...”

However, the quiet professionals of the enlisted aviation Soldiers rarely discuss their awards. In fact, without asking you’d never know they were heroes (a reference they’d never use to describe themselves).

One such Soldier is Sergeant First Class Eugene M. Sides. As an instructor at Fort Rucker’s Aircrew Standards Instructor Course his students would never know he was awarded the Distinguished Flying Cross. In fact his chain of command didn’t know anything about it until his first sergeant got a call saying that the commanding general of Fort Rucker wanted to pin on the award himself.

SFC Sides, “there I was...” moment began the evening of January 9, 2011. He was the crew chief for an armed Black Hawk helicopter, flying for the 160th Special Operations Aviation Regiment (Airborne).

As the helicopter assault force approached the target the flight began taking effective rocket propelled grenade (RPG), small arms and heavy machine gun fire from both sides of the flight. As his aircraft maneuvered, SFC Sides returned fire with his M-4 while fully exposed through the open cabin door. He engaged multiple enemy combatants who had just fired two RPGs at the flight.

His calm demeanor and experience allowed him to relay critical information to the pilots as he continued to reduce the enemy force. SFC Sides provided suppressive fire as the flight maneuvered for six separate direct fire engagements. During the two hour battle he twice fixed malfunctioning mini-guns and re-seated high explosive rockets.

Interviewing SFC Sides for this piece I found him to be a focused, soft-spoken Soldier who is comfortable in his own skin. His work allows for both classroom and flight instruction. He enjoys his family, camping, NASCAR, and raising money for the Wounded Warrior Project and he is a new member of the Aviation Center chapter of AAAA.

His actions distinguished him as an exemplary Soldier, warrior and non-commissioned officer.



MG Kevin W. Mangum, USAACE and Fort Rucker commanding general, talks about Sgt. 1st Class Eugene M. Sides, 1st Bn., 212th Avn., just before pinning the Distinguished Flying Cross on the NCO March 21 at USAACE HQ.

PHOTO BY JIM HUGHES, COMMAND INFORMATION OFFICER



MG (Ret.)  
Patrick H. Brady

On July 14, 1964 the National Aviation Hall of Fame (NAHF) was chartered by the Congress of the United States. Its mission – recognize aviation achievement generated by American ingenuity and individual acts of great vision, persistence, skill and courage. It’s hard to believe that there were zero Army aviators in the National Aviation Hall of Fame – until this month.

On the evening of October 4th, 2013 MG (Ret.) Patrick H. Brady was inducted into the NAHF. A Medal of Honor recipient, he is (in this author’s opinion) the perfect candidate to be the first Army aviator selected for enshrinement.

He flew 2,000 combat missions during his two tours in Vietnam and saved more than 5,000 wounded Soldiers. However, on January 6, 1968 he evacuated fifty-one wounded South Vietnamese and U.S. Soldiers under the most trying of circumstances.

On the first mission that day he volunteered to fly through thick fog to get wounded Soldiers off the battlefield. To accomplish his mission he followed a jungle trail leading him through enemy held positions to the landing zone. His crew loaded the casualties and off they flew back through the fog.

His next mission was again through the fog. The enemy was a mere 50 meters from the casualties. Two aircraft had already been shot down attempting the MEDEVAC and several others had tried and failed.

Then-Major Brady made four separate flights into the landing zone to pick up all the casualties. The UH-1’s flight controls took several hits – it was time to change aircraft.

MAJ Brady’s day was not done.

An American unit was trapped in a minefield with casualties and he again answered the call, landing his helicopter in the minefield and his crew retrieved the casualties.

On their way back to the aircraft they detonated a mine and both were injured with the aircraft taking significant shrapnel damage. Finally, with crew and casualties on board, MAJ Brady flew to the medical aid station.

MG (Ret.) Brady’s flying skills and courage are legendary. He set the example for every aviation Soldier that followed him.



CW5 (Ret.) Dave Cooper  
AAAA VP for Membership



# Iron Eagle Brigade Activates



U.S. ARMY PHOTO BY SGT. JONATHAN C. THEBAULT, 4TH CAB PWO

The "Iron Eagles" of the 4th Combat Aviation Brigade, 4th Infantry Division are officially back in the sky again, two years after the CAB was deactivated at Fort Hood, TX. BG Michael Bills, left, deputy commanding general of the 4th Infantry Division and Fort Carson, CO watches as COL Robert T. Ault, middle, brigade commander, passes the brigade colors to CSM Antoine J. Duchatelier Jr., right, senior enlisted leader, during the 4th Combat Aviation Brigade, 4th Inf. Div., activation ceremony on Founders Field at Fort Carson, CO, July 2, 2013.

In addition to the CAB headquarters, 2nd Bn., 4th Avn. Regt. and the 404th Avn. Spt. Bn., minus, are currently active and already have been providing support to the local community firefighting and flood relief efforts, even before their formal activation. The remainder of the CAB's units (1st, 3rd, and 4th Bns., 4th Avn. Regt.), are scheduled for activation in April, 2014.

*Editor's Note: 4th CAB information was not available in time for inclusion in the 2013 Blue Book; we have included it here and in the digital edition which will be available to AAAA members only.*



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I certify that the statements made by me in this statement and dated October 1, 2013 are correct and complete.

William R. Harris Jr., Publisher



# Planning for the Holidays

By Judy Konitzer

I recently visited my local Costco store only to find Christmas decorations appearing on the shelves.

Wait a minute, I thought, it's 95 degrees outside (at least in Georgia); I still have lots of fall left; and I am "wearing white after Labor Day."

But the reality of it all is pretty striking when it was reported that the average American is expected to spend \$854 on gifts during the upcoming holiday season. Of course not all will, and many will spend much more, but spending anything that strains your finances or saddles you with any post-holiday debt is not good for your financial future.

With this in mind, I was struck by a recent blog from Holly Petraeus, the assistant director of the Consumer Financial Protection Bureau (CFPB), Office of Servicemember Affairs, called *December in August* on the CFPB Military Affairs Facebook page.

In the February 2012 edition of our magazine I wrote about Holly's position as our advocate and her passion for helping our troops and their families make better financial decisions on financial products and services that are particularly challenging for them.

She has continued to be active in this role and on July 13 testified before the U.S. Senate Committee on Veterans Affairs about some egregious abuses made evident from over 8,713 complaints from veterans and their family members since July 21, 2011 and the initiatives being taken to rectify these.

Over 43% of the complaints received are mortgage related, 17 percent credit card complaints, and 12 percent bank account or service complaints. The CFPB also recently began taking credit reporting and debt collection complaints.

CFPB has helped military families obtain monetary as well as non-monetary relief and has worked with the



Grandchildren of BG (Ret.) Tom and Judy Konitzer share a treasured tradition of their own "cousins Christmas gift exchange."

Department of Defense to create a financial module to be included in the recently revised Transition Assistance Program for those departing the military as well as initiatives to offer financial coaching services to those who have already transitioned.

Holly advises all servicemembers, veterans, retirees, and military spouses to go to [consumerfinance.gov](http://consumerfinance.gov) and file a complaint if they are having problems with a mortgage, credit card, student loan, or other consumer financial product. Now back to this blog about holiday spending. Some basic ideas on how to do this realistically include:

### Setting Reasonable Expectations

It is not too early to talk with your family and friends about realistic spending limits. Giving less expen-

sive options like homemade gifts, and picking one person out of a hat for large and extended families and buying one gift for them versus for everyone in the family is certainly very doable. The Konitzer family (7 children plus spouses) have been doing this for years and now the seven grandchildren have started their own exchange – sharing this way has become a treasured tradition!

### Plan, Budget, and Save

By making up the gift list now, you could gradually start setting money aside for these presents. Banks and credit unions sometimes offer a Christmas club or holiday savings accounts; and for those of you in my age group, remembering old fashioned layaway is yet another option.

## Keep the Big Picture in Mind

Things other than gifts can add up also. There are the big holiday dinners and parties, traveling to see family and friends, and by the way the increased electricity costs to run those massive holiday light displays. Keep these in mind.

## Look for Ways to Save

You can save money by catching early sales, comparison shopping, ordering from websites or stores offering free shipping, shopping at discount stores, and buying items that offer rebates.

## Watch Out for Costly Surprises

It is important to understand the terms and conditions when using gift cards or layaway plans. Expiration dates, and hidden fees on gift cards can make using these less valuable.

Sometimes credit cards are offered at the checkout which can save you a few dollars at the register today, but have high interest rates later.

## Avoid Holiday Debt Traps

Sometimes deals seem like bargains but don't rush to a store to get



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a \$3,000 TV for \$2,000 if it is not something you planned to buy in the first place. Payday lenders who want to “help” you can be enticing too, so be careful here. When the holidays are over, you can be left with high-interest debts that can last for months. In the end, “holiday spending is short-term spending” Petraeus advises.

How long will the excitement last once the unwrapping frenzy is over? Holly recommends “... saving your money for long term goals like home ownership, college or a comfortable retirement may be the very best gift you can give yourself and your loved ones.”

I have to admit that thinking about “December in August” while I’m continuing to enjoy fall, is something I have rarely done, but today is a new day, and I think I’ll create a new plan. When the holidays actually arrive, I might be able to enjoy them more and, even better yet, pay for them!



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

# AAAA Awards Open For Nominations

## AAAA Functional Awards

Presented at the Cribbins Aviation Product Symposium *Suspense: November 1*

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

*Nomination forms for all of the AAAA Awards are available through the AAAA website: [www.quad-a.org](http://www.quad-a.org) or call the AAAA National Office at (203) 268-2450*

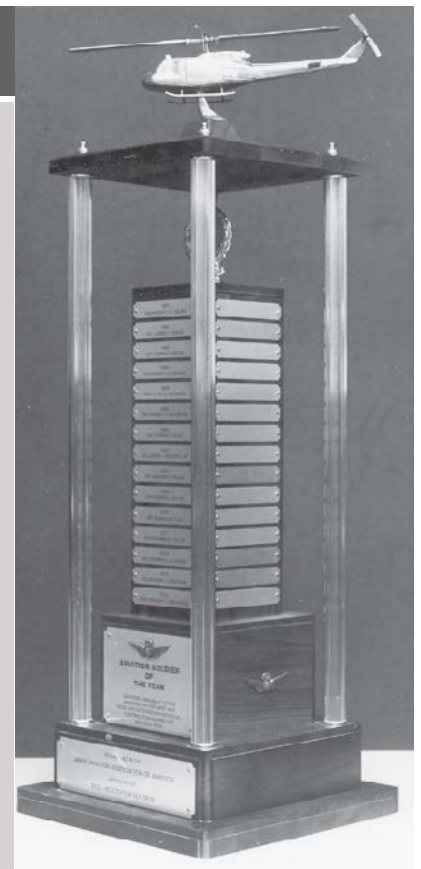
## AAAA National Awards

Presented at the AAAA Annual Mission Solutions Summit *Suspense: January 1*

- Joseph P. Cribbins Department of the Army Civilian of the Year
- James H. McClellan Aviation Safety
- Henry Q. Dunn Crew Chief of the Year
- 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
- AAAA Army Reserve Aviation Unit of the Year
- AAAA John J. Stanko Army National Guard Aviation Unit of the Year
- AAAA Active Army Aviation Unit of the Year
- AAAA Outstanding Aviation Unit of the Year
- Top AAAA Chapter of the Year
- Top AAAA Senior Chapter of the Year
- Top AAAA Master Chapter of the Year
- Top AAAA Super Chapter of the Year

## AAAA Hall of Fame Inductions

Presented at the AAAA Annual Mission Solutions Summit *Suspense: June 1*



Although Vietnam was the first large combat test of airmobility, air assault operations in Southeast Asia would not have been possible without certain key decisions a decade earlier . . . - LTG John J. Tolson<sup>1</sup>



## 50 Years Ago: Army Aviation in Vietnam — Setting the Stage

By Mark Albertson

General Tolson's reference to history is correct: Vietnam carried forth what had been started in Korea: reliance on the helicopter as a battlefield conveyance of troops and stores to force a decision upon the enemy. Rotary wing capability also represented an understanding of the new strategic/tactical reality that was the result of atomic weaponry.

The Marine Corps offers a case in point. LTG Roy Geiger, USMC, witnessed the Bikini bomb tests in 1946.

He immediately understood that America's atomic monopoly was tenuous and that the present conduct of amphibious operations was suddenly obsolete. Dispersal, then, became the order of the day.

Besides hitting the beaches, troops had to be landed inland. Committing troops beyond the beaches was nothing new, having been done via glider and parachute in World War II. However the former lacked an internal power source and was not always found to be reusable; while inserting troops with the latter was often dependent upon the whim of the breeze.

But rotary wing aircraft offered the promise of landing, supplying and evacuating troops with a continuity

and accuracy unapproachable with glider and silk; hence the Vertical Assault Concept. Yet the first combat test of the Vertical Assault Concept was not action on a hostile beachhead; rather, as a way to circumnavigate a brutal stalemate in the rugged mountain wastes of Korea.



The helicopter came of age in Korea as a useful conveyance of troops and stores in war.

LTG James M. Gavin, *Airborne Soldier Extraordinaire*, shared the Marine Corps' affinity for the helicopter as a solution to mobility. That light fixed wing and rotary wing aircraft were the steeds for the modern cavalry concept.

In his "Cavalry, and I Don't Mean Horses,"<sup>2</sup> Gavin argued that if forma-

tions of Sky Cavalry had been committed during the summer of 1950, they could have bolstered the flagging South Korean forces in the face of the armored onslaught of the North Korean People's Army. Sky Cavalry units could have slowed the Communist hordes until the arrival of heavier UN forces.

For both the Army and Marine Corps, the poor Korean road system played to the vertical talents of the helicopter, shuttling troops, evacuating wounded and moving supplies. The mountainous hinterland proved amenable to the helicopter over fixed wing aircraft, which needed longer runways for landings and takeoffs. Korea, then, sold the idea of airmobility.

At the time, airmobility meant the conveyance of troops and stores into combat from outside the battle zone.<sup>3</sup>

And while Korea seemed to herald the success of the concept, there arose a development after the war which threatened to relegate airmobility to insignificance.

President Eisenhower, not wanting America to become mired in another costly stalemate, favored "Massive Retaliation,"<sup>4</sup> as part of the New Look doctrine on defense. America's military posture would rely on a pow-



Mushroom cloud over Hiroshima. The atomic bomb spurred the use of the helicopter to disperse troops on the nuclear battlefield.

National Museum of the U.S. Air Force

erful deterrent based on atomic weaponry delivered by a peerless strategic bomber force, hence Strategic Air Command or SAC.<sup>5</sup>

This is a repeat of the post World War I era, where proponents saw the bomber and its alleged ability to destroy an enemy's capacity to wage war as a prophylactic to the ghastly horrors of the trenches on the Western Front.

The bomber was new technology; the foot soldier and his weapons? . . . old technology; therefore, the former would displace the latter.

This same rationale followed Korea; only now, the atomic bomb added to the luster of the bomber.

The Army's reduced stature in the New Look defense posture caused it to keep pace with tactical nuclear weaponry. Battlefield nuclear warheads on the Corporal, Sergeant and Honest John missiles; and, nuclear-tipped artillery projectiles like those fired from the M65 280mm were to offset the growing Soviet conventional capability.

In addition, the Pentomic Division was to replace the Triangular Division of World War II and Korea.<sup>6</sup> As a smaller and lighter division, the Pentomic structure was seen as a more mobile formation for the nuclear battlefield.

But along the lines of the Marines' Vertical Assault Concept, the Army was proceeding with the dispersal of troops on the atomic battlefield.

According to Project Binnacle,<sup>7</sup> the Army could expect upwards of 35% casualties on a monthly basis when engaging in an atomic war in Europe; a prognosis based on a manpower strength of 2,000,000. A dreary prospect when one considers that the Army had gone from 1.5 to 1.0 million men.<sup>8</sup>

Enterprising officers like COL Jay D. Vanderpool continued to experiment with the helicopter, molding it as a gun platform and, continuing the idea of rotary wing aircraft as the battlefield conveyance for troops on a nuclear battlefield; and, as providing that edge in mobility in the face of superior Warsaw Pact numbers in Europe.

But the Soviets forged ahead with a nuclear arms buildup of their own. And as the Eisenhower Presidency gave way to the Kennedy Administration, a new doctrine appeared: "Flexible Response."

The Kennedy White House saw a more balanced approach to deterrence; and that meant a larger and more mobile conventional capability



**Boeing B-52B, stablemate of the B-47, formed the backbone of President Eisenhower's post-Korean War strategic deterrence known as 'Massive Retaliation.'**

to supplement the nuclear arm. The new administration's accent on mobility translated into an increased reliance on the helicopter.

The Rogers Board of 1960 and the Howze Board of 1962 indicated the direction in which the Army was headed, based in part on the post-Korean War endeavors of such officers as Hutton, Vanderpool, Howze, Gavin, Bunker and others.

But like the Marine Corps with the Vertical Assault Concept, the Army's version of airmobility would not see its first test on the nuclear battlefield; rather, in another post-World War II civil war turned test of strength between global competitors: Vietnam.

### Notes

1. See page vi, Preface, *Vietnam Studies: Airmobility 1961-1971*, by LTG John J. Tolson.

2. *Harper's*, April 1954.

3. See pages 20 and 21, chapter 1, *Interservice Rivalry and Airpower in the Vietnam War*, by Dr. Ian Horwood. Dr. Horwood describes Airmobility as, "Only slowly had the combination of the words "air" and "mobility" acquired this meaning. Back in the 1940s and 1950s, the term 'air-mobility' had simply meant the air transport of troops and supplies into the combat zone from some point outside it. Dramatic enough in its day, this air mobility was not to be confused with the deeper penetration . . . performed by airborne parachute and glider forces. It did not originally imply dedicated airmobile units, or organic fire support and, despite the increasingly frequent use of the term 'air assault,' neither did it imply opposed landings by airmobile troops."

4. President Eisenhower is reputed to have remarked, "...never again would the United States become bogged down in a war like the one in Korea, where the full brunt of American power could not, or would not be applied." See pages 22

and 23, chapter 1, *Anything But: Joint Air-Ground Training at the U.S. Army Ground Combat Training Centers*, LTC Phillip B. Barks, USAF.

5. The Navy was to bolster SAC with a large force of aircraft carriers capable of accommodating nuclear weapons.

6. The Triangular Infantry Division was based on a combat power of three infantry regiments, each of which, on July 15, 1943, boasted a strength of 3,256 men, total strength of 14,253 troops per division. See page 183, Chart 19, Chapter VII, "The Crucible—Combat," *Maneuver and Firepower: The Evolution of Divisions and Separate Brigades*, by John B. Wilson. By July 7, 1948, the Department of the Army authorized the standard infantry division to total 18,804 men, based on three combat regiments of 3,774 men each. See page 226, Chart 23, Chapter VIII, "An Interlude of Peace," *Maneuver and Firepower*, by Wilson. On February 1, 1960, the Pentomic Infantry Division stood at 13,748 men, based on five battle groups or regiments of 1,356 men each. See Chart 32, page 283, Chapter X, "The Search for Atomic Age Division," *Maneuver and Firepower*, by Wilson.

7. "... the Advanced Study Group at the Army War College developed Project Binnacle, a blueprint for the organizational structure of the Army for 1960-1970.

Binnacle was predicated on the assumption that the Soviet Union and the United States/NATO would fight a major ground war for the control of Western Europe in which hundreds of nuclear weapons would be used and hundreds of thousands of casualties would be inflicted . . . See page 81, chapter 3, "The New Division," *Intimidating the World: The United States Atomic Army 1956-1960*, by Paul C. Jussel

8. In June 1950, the Army stood at 600,000 men. In June 1953, manpower strength was some 1,500,000. Annual appropriations went from \$6 billion to \$17 billion over the same period. After the Korean conflict, appropriations fluctuated between \$9 to \$10 billion with manpower hovering at or below 900,000. While these reductions were modest compared to earlier standards, the Army was still relegated to second class citizenship within the New Look defense posture. See page 216, Chapter VI, "The Post-Korean War Army," *From Root to McNamara, Army Organization and Administration*, by James E. Hewes Jr.



*Mark Albertson is an award winning historian and contributing editor to ARMY AVIATION magazine.*

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

## Bell Helicopter and Lockheed Martin Team on V-280 Valor



LOCKHEED MARTIN GRAPHIC

Bell Helicopter, a Textron Inc. company, and Lockheed Martin announced on Sep. 10, they will work as a team on the Bell V-280 Valor™, Bell's entry into the joint multi-role or future vertical lift program. Lockheed Martin is the first of Bell Helicopter's V-280 program tier one team members. The joint multi-role demonstrator program is a precursor to what the Army is calling future vertical lift, a series of next-generation vertical takeoff and landing aircraft that will replace the aging helicopter fleet. Prototypes for a new platform could be flown as early as fiscal year 2017. AVX Aircraft Company, Bell Helicopter Textron, Inc., Karem Aircraft, Inc., and Sikorsky Aircraft Company, were each awarded a Technology Investment Agreement on Oct. 2 by the U.S. Army Aviation and Missile Research, Development and Engineering Center (AMRDEC) to refining their initial designs and making preparations toward potentially building and flight-testing a joint multi role technology demonstrator (JMR TD) aircraft. Industry officials expect that the Army will choose two vendors to build demonstrators that will fly sometime between 2017 and 2019.

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

**The Boeing Company, Mesa, AZ** was awarded a \$22,706,288 cost-plus-incentive-fee, non-option-eligible, non-multi-year contract modification of a contract for development and demonstration of the AH-64 Apache Block III system. Performance location will be Mesa, AZ.

**The Boeing Company, St. Louis, MO**, was awarded a \$14,401,508 firm-fixed-price, option eligible, non-multi-year contract for acquisition of four Longbow crew trainers for the Apache helicopter program. Performance location will be St. Louis.

**The Boeing Co., Ridley Park, PA**, was awarded a \$19,253,048 cost-plus-fixed-fee, non-option-eligible, non-multi-year contract modification of a contract to obligate funding for sustaining engineering on delivery order 0261 of basic ordering agreement for the MH-47G new build. Performance location will be Ridley Park.

**EADS North America**, Herndon, VA, was awarded two contracts: —a \$12,921,227 modification to a previously awarded firm-fixed-price, option-filled contract for contractor logistics support for the Army's aviation assets with a cumulative total face value of \$2,265,423,694; work will be performed in Columbus, MS; and, —a \$21,767,416 modification to a previously awarded firm-fixed-price, option-filled contract for continued contractor logistical support services with a cumulative total face value of \$2,303,079,504.

**General Atomics Aeronautical Systems, Inc.**, Poway, CA, was awarded three contracts:

—a \$199,746,895 firm-fixed-price, option-eligible, non-multi-year contract to provide MQ-1C Gray Eagle fiscal year 2013 full rate production and fiscal 2012 hardware backfill requirements applicable to the Gray Eagle Unmanned Aircraft System – performance location will be Poway;

—a \$70,163,380 cost-plus-incentive-fee, non-option-eligible, non-multi-year contract to conduct MQ-1C Gray Eagle 4.3.2 software development and depot repair of related spares – performance location will be Poway; and,

—an \$86,556,544 cost-plus-incentive-fee modification which definitizes a letter contract modification for fiscal year 2013 Gray Eagle performance-based logistics product support for Block 1 program of record and quick reaction capability – performance location is Poway.

**Honeywell International Inc.**, Phoenix, AZ, was awarded a firm-fixed-price, option-filled contract with a maximum value of \$29,375,653 for the procurement of T-55 engines for the CH-47 Chinook aircraft with a foreign military sales option included for potential use in the future. Performance location and funding will be determined with each order.

**Longbow LLC**, Orlando, FL, was awarded two contracts:

—a \$6,778,000 modification to a previously awarded firm-fixed-price contract for services in support of the low rate initial production of Radar Electronics Unit and Unmanned Aerial System Tactical Common Data Link Assembly – the cumulative total face value of this contract is \$182,288,374; and,

—a \$7,457,989 multi-year, cost-plus-fixed-fee contract with options which exercises options for engineering services in support of the Laser Hellfire Missile program – performance location is Orlando.

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### Changes of Command

#### White Takes the Reins at 21st Cav



U.S. ARMY PHOTO BY ZIST CAV BDE

The 21st Cavalry Brigade (Air Combat) welcomed **COL John C. White** (left) as its new commander during a change of command ceremony hosted by MG Anthony R. Ierardi (center), commanding general of the 1st Cavalry Division, on Friday, May 31, 2013 at Sadowski Field, Fort Hood, TX. Outgoing commander, COL Neil S. Hersey (right), will assume command of Task Force ODIN Afghanistan.

#### Warriors Welcome Altieri



U.S. ARMY COURTESY PHOTO

**COL Jayson A. Altieri** (left) accepts the 110th Aviation Brigade colors from MG Kevin W. Mangum, U.S. Army Aviation Center of Excellence and Fort Rucker commanding general, as outgoing commander, COL Kevin J. Christensen (right) looks on during a change of command ceremony held on Aug. 9, 2013 at Howze Field, Fort Rucker, AL. The 110th Aviation Brigade, which flies close to 500 aircraft daily, is responsible for training 1,300 Army, Air Force, and international military aviators annually in the AH-64 Apache, CH-47 Chinook, and UH-72

Lakota helicopters. The brigade is also responsible for five Army airfields, 7 stage fields, and 83,000 square miles of training area. Altieri has had multiple deployments to Iraq and Afghanistan and is a Master Army Aviator with more than 2,000 hours. Christensen is currently serving on the Joint Staff, in the Pentagon, Washington, D.C.

#### Daniels Takes Over the Flying Dragons



U.S. ARMY COURTESY PHOTO

The 6th Battalion, 52nd Aviation Regiment, U.S. Army Reserve, conducted a change of command ceremony on the flight line at Los Alamitos Army Airfield in Orange County, CA on June 30, 2013. Pictured from left to right are outgoing commander, LTC James G. Hollingsworth; BG Troy Kok, Commanding General, 11th Aviation Command; and incoming commander, **LTC Lori L. Daniels**. The Flying Dragons were recognized as the Army Aviation Association of America's Fixed Wing Unit of the Year for 2012.

### Change of Charter

#### Brashear New PM NSRW



U.S. ARMY PHOTO BY RANDY TISOR, PEO AVIATION PUBLIC AFFAIRS

Dennis Williamson, PEO Aviation chief of staff, presents **COL James B. Brashear** with the Charter for the Non-Standard Rotary Wing Aircraft Project Office Aug. 7 during a change of charter ceremony held on Redstone Arsenal. Brashear assumed responsibility for the project office from

Kelvin Nunn who had held the position for 10 months and will return to his former position as deputy project manager for the office. Brashear most recently served as the director of the Defense Science and Technology Center dating to 2009. He had also previously served as the first centrally selected product manager for the Light Utility Helicopter Product Office, PEO Aviation. The NSRWA Project Office manages a diverse fleet of aircraft to include MD-500E, MD-530F, MD-600N, AH-6i, Bell 412, UH-1, Huey II, AH-1 and AW-139 helicopters

### Promotions

#### McDonald Promoted



U.S. ARMY PHOTO BY NICK VAN WALKENBURGH, PM CARGO

**Timothy D. McDonald** was promoted to lieutenant colonel at a ceremony in the Project Office for Cargo Helicopters building, Redstone Arsenal, AL on Sep. 3. MG William "Tim" Crosby (middle right), Program Executive Officer for Aviation, presided over the ceremony. Also pictured are McDonald's wife, Amanda, and son Logan. McDonald served as an Executive Officer to the PEO and later as the Joint Heavy Lift Branch Chief at the Directorate of Combat Developments. He also served as Assistant Product Manager for Product Improvements in the Project Office for Cargo Helicopters and as APM for Modifications and Production at PM Non-Standard Rotary Wing Aircraft. He is now serving as the Systems Integration Officer for the U.S. Army Special Operations Aviation Command, stationed at Fort Campbell, KY.

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### Deployments/Redeployments

#### 4-6 Cav First U.S. Army Rotational Unit to ROK



U.S. ARMY PHOTO BY SSG BRYAN LEWIS

Soldiers and families from 4th Squadron, 6th Cavalry Regiment, 16th Combat Aviation Brigade say final goodbyes Sept. 24 at the 4-6th hangar on Gray Army Airfield prior to the main body rollout for a nine-month rotational deployment to South Korea. Army officials announced the deployment earlier in Sep. in support of the U.S. defense commitment to South Korea as specified by the mutual defense treaty and presidential agreements.

The Redcatcher Squadron's 380 members will operate in support of U.S. 8th Army, as part of 2nd Combat Aviation Brigade, 2nd Infantry Division as the first U.S. rotational land force in the region. The unit, commonly referred to as the 4-6th Attack Reconnaissance Squadron (ARS), deployed with 30 OH-58D Kiowa Warrior helicopters. The aircraft were shipped from Tacoma, WA, and plans call for the squadron to leave the helicopters behind after the deployment is completed for use by the follow-on rotational unit.

### Awards

#### Colorado Recognizes Support Efforts



U.S. ARMY PHOTO BY SGT. JONATHAN C. THIBAUT, 4TH CAB PUBLIC AFFAIRS

COL Daniel Miller, right, Title 10 deputy to Dual Status commander, Joint Task Force Centennial, awards the Colorado National

Guard Achievement Medal to LTC Tyler Smith, left, battalion commander, and 1SG Damion Vaughn, middle, Company A, both from 2nd General Support Aviation Battalion, 4th Aviation Regiment, 4th Combat Aviation Brigade, 4th Infantry Division at Butts Army Airfield on Fort Carson, CO, Sep. 20, 2013.

They were recognized for their commitment to the rescue and recovery operations that were conducted with the Colorado National Guard and other emergency agencies involved in the Colorado floods.

#### Gallagher Honored at Ft. Dix



U.S. ARMY PHOTO BY ED MINGIN, TSC/MAR, FT. DIX, NJ

COL (Ret.) John Gallagher (center), former commander of the 244th Aviation Brigade (U.S. Army Reserve), 11th Aviation Command, and retired Army colonels Don Tretola (left), and Al Squitieri, are inducted as Honorary Commanders of the Army Support Activity-Fort Dix by COL Jeffrey Doll, ASA commander, and CSM Steven Whittaker, ASA command sergeant major, Sept. 25. The Honorary Commander's Program mission is to educate key community leaders and the public about the varied missions performed by Army Support Activity Fort Dix that has community involvement as part of

the activity's team. Gallagher, Tretola, and Squitieri will serve as community ambassadors for the next year.

#### Kopra Announced for ISS Crew



NASA PHOTO

NASA and its international partners have appointed future crew members for the International Space Station. NASA astronaut Tim Kopra and European Space Agency astronaut Tim Peake are scheduled to launch in December 2015 and return to Earth in spring 2016. They will join the Expedition 45 crew members in orbit and will remain aboard as part of Expedition 46 with yearlong expedition Commander Scott Kelly and Flight Engineer Mikhail Kornienko. This will be the second long-duration spaceflight for Kopra, a retired U.S. Army colonel, helicopter pilot and graduate of the U.S. Military Academy. Kopra was a flight engineer aboard the station during Expedition 20 in 2009. He launched with the STS-127 crew aboard the Space Shuttle Endeavour on July 15, 2009 and returned to Earth with the STS-128 crew aboard the Space Shuttle Discovery on September 11, 2009.

During the two shuttle missions and tour of duty aboard station, Kopra performed one spacewalk totaling 5 hours and 2 minutes, executed assembly tasks with the space station and Japanese robotic arms, and conducted numerous science experiments.

## Attention AAAA Members

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**Flight School Graduations**

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.

**31 Officers, August 8**
**IERW AH-64D Track  
Class 13-920**

WO1 Ryan W. Boschert

**IERW UH-60 Track  
Class 3-002**

WO1 Richard T. Machina – DG  
LT Curtiss J. Shorkey\* – DG  
LT Jacob I. Lee – HG  
WO1 Ricky E. Wise – HG  
LT Zachary L. Betts  
WO1 Justin L. Blakemon  
WO1 Patrick J. Gargan\*  
WO1 Derek C. Haskin\*  
LT Andrew J. Klutz  
LT Brady L. Lemons  
LT Bradley M. Martin\*  
LT Michael Mitchell\* I  
LT Eric M. Page  
WO1 John J. Seeger\*  
WO1 Jose M. Silva  
WO1 Holly N. Simon\*  
LT Christopher J. Trawick  
LT David C. Wendt

**IERW UH-60A/M Track  
Class 13-923**

WO1 Matthew A. Bricker – DG  
LT Matthew B. Dubie – DG  
WO1 Brent G. Allred\* – HG  
WO1 Matthew D. Bermel\*  
LT Matthew S. Corriveau\*  
WO1 Brandon M. Dean  
LT Landen M. Ellyson\*  
LT Timothy S. Kranz\*  
WO1 William D. Meier  
WO1 Justin R. Roe  
WO1 Andrew Salvador  
WO1 Abraham L. Swisher

**60 Officers, August 22**
**IERW AH-64D Track  
Class 13-922**

WO1 Derek J. Zaleski\* – DG  
WO1 Jason L. Smitherman\* – HG

WO1 James Allen  
WO1 William J. Bell  
WO1 Loren Berg  
LT Brady T. Boyd  
WO1 Byron J. Covington  
WO1 Joshua B. Jackson  
LT Neal E. Jelsma  
WO1 Daniel S. Kennedy  
CPT Steven E. Mohr  
WO1 Paul E. Nelson  
WO1 Matthew C. Powell  
WO1 Brian D. Verges  
WO1 Rebekah M. Wottge

**IERW CH-47D Track  
Class 13-003**

WO1 Craig E. Hannon – DG  
WO1 Daniel R. Fenstemaker  
LT Derek J. Lynaugh  
LT Alyson Miller  
WO1 Garrett A. Scholten

**IERW OH-58D(R) Track  
Class 13-924**

WO1 Kevin F. Burke – DG  
LT Jared M. Gantt – DG  
WO1 Brian D. Bellamy\*  
LT Eric R. Bowerman  
WO1 Matthew A. Brown\*  
LT Tyler C. Edstrom  
WO1 Travis L. Harrison  
LT Benjamin H. Isaacs  
LT Lukas C. Montion  
WO1 Mitchell V. Morse  
LT James M. Reaves\*

**IERW UH-60 Track  
Class 13-003**

LT Rumeul A. Lewis\* – DG  
WO1 Barry C. Perkins – DG  
LT Michael W. Volkert – HG  
WO1 Billie R. Bannister  
WO1 David C. Campbell  
LT Charles F. Christianson  
LT Matthew J. Conners  
LT Jarred C. Cook\*  
LT John P. Gomez  
WO1 Justin S. Harvey  
WO1 Peter J. Leslie  
LT Michael J. Pearce  
LT Daphne R. Piper  
WO1 Abby P. Siakpere  
WO1 Patrick W. Stark  
WO1 Jeffrey W. Steere  
LT Joshua M. Tauer

**IERW UH-60A/M Track  
Class 13-924**

WO1 James T. Bowman – DG  
LT Jon E. Ruble – DG  
WO1 Richard S. Augustine  
WO1 Jonathan Z. Campbell

WO1 Douglas S. Crawshaw\*  
LT Jonathan A. Foti  
WO1 Nicholas S. Freeman\*  
LT Kyle F. Hughes\*  
LT Christopher D. Matteson  
LT Paul J. Stella\*  
CW2 Drew J. Valsvig\*  
WO1 Alexander J. Wales

**14 Officers, September 5**
**IERW UH-60A/M Track  
Class 13-001**

WO1 Brian R. Goff ---- DG  
LT Matthew F. Rongey\* ---- DG  
LT William E. Mayne ---- HG  
LT Stephen A. Araniecke  
LT Christopher S. Cannon\*  
LT Joel Castillo  
LT Joel P. Heifner  
LT Darrek R. Ladermann  
WO1 Benjamin D. Lind  
WO1 Philip L. McAuliffe  
LT Katlyn C. Pearsall\*  
LT Patrick J. Peterson  
WO1 Andrew Salvador

**IERW CH-47D Track  
Class 13-003**

WO1 Michael Horrigan

**80 Officers, September 19**
**IERW AH-64D Track  
Class 13-924**

WO1 Keith A. Rames – DG  
LT Brain E. Ward – DG  
WO1 Matthew A. Bailey – HG  
WO1 David L. Andraske  
WO1 Aaron B. Bronson  
WO1 Alexander J. Chambers  
LT Jared A. Hoffman  
WO1 Kristopher R. Knue  
LT Michael D. Kromenacker\*  
WO1 Miguel Franco S. Lopez  
LT Benjamin E. McPherson  
WO1 David M. Nerio  
WO1 David W. Reynolds  
WO1 Anthony J. Rocha  
LT Sean D. Springer\*  
LT Seth S. Winchel  
LT Tai-Shan Zen

**IERW CH-47D Track  
Class 13-005**

WO1 Joshua D. Carter – DG  
LT Charles B. Auer\*  
WO1 Josue M. Coronado  
LT Brandon S. Long  
WO1 Jesse E. Montes  
WO1 Michael F. Murray

**IERW OH-58D(R) Track  
Class 13-002**

WO1 Chris D. Bridges – DG  
LT Gray A. Slother – DG  
LT Jennifer L. MacGibbon – HG

LT Matthew W. Carter\*  
LT Alexander J. Cleppe  
WO1 Nicholas S. Hash  
LT John R. Nachtmann  
WO1 Weston D. Parker  
LT Brendan J. Podszus  
WO1 Eric R. Santiago\*  
LT Levi J. VanPelt

**IERW UH-60 Track  
Class 13-004**

WO1 Stephen J. Connelly – DG  
LT Timothy G. Swenson – DG  
LT Daniel T. Burrow – HG  
WO1 Justin M. Ables  
LT David J. Alexander  
WO1 Matthew J. Corica\*  
LT Brian A. Degelow  
LT Tatum M. Donnelly  
LT Robert B. Forney\*  
WO1 James C. Kerwin  
LT Laura K. Kirchner  
LT Timothy P. McAndrew  
LT Ashleigh M. Pellerin  
LT Jared R. Varney\*  
LT Benjamin Madera Jr.\*  
WO1 Daniel M. South

**IERW UH-60 Track  
Class 13-005**

WO1 Eric A. Dietz – DG  
LT Ryan L. Silver\* – DG  
LT Robert J. Ferrainolo\* – HG  
LT Spencer J. Boyd  
LT Glenn P. Dorth  
LT Hiram A. Figueroa Cruz\*  
LT Daniel J. Fuentes\*  
LT Jonathan J. Lafitte  
WO1 Bo B. Lamar  
LT James D. Reeves\*  
LT Bethany M. Rogers\*  
LT Matthew P. Sandoval\*  
WO1 Jorge L. Santiago  
LT Travis F. Siegle\*  
WO1 Frederick S. Simpson  
WO1 Ryan F. Wann

**IERW UH-60A/M Track  
Class 13-002**

LT Brett D. Mather\* – DG  
WO1 John S. Worth\* – DG  
LT Derrick P. Bouldin, Jr. – HG  
WO1 James R. Aldana, Jr.\*  
WO1 Christopher C. French\*  
LT Jared J. Heiney  
LT Jonathon T. Hingey\*  
LT Michael W. Maddox  
LT Daniel G. Prial\*  
LT Lauren M. Rattan  
LT Michael B. Rothenberger  
LT Ryan F. Stapleton\*  
LT Michael H. VanOteghem\*  
WO1 Casey B. Wilcoxon\*

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

### Advanced Individual Training (AIT) Graduations

AAAA congratulates the following graduates of the indicated Advanced Individual Training (AIT) courses at Fort Rucker, AL.

#### Aircraft Pnedraulics Repairer (15H)

##### Class 13-009, August 2 8 Graduates

PFC Carson Cherry – DG  
SPC Oluwasegun Ayomide  
PFC Courtney Grubbs  
PFC Desean Owens  
PV2 Robert Stevenson  
PFC Christopher Vanblarcom\*  
PFC Devaun Wilridge  
SPC Christopher Yerkes

##### Class 13-010, August 23 12 Graduates

PV2 Michael R. Jones – DG  
PFC Jeremy W. Carder – HG  
PFC Douglas E. Brisbois  
PV2 James E. Cornelius III  
PV2 Devon R. Dahl  
PFC Stager L. Horton  
PV2 Blake D. Johnson  
PFC Elijah C. Lloyd  
PV2 Cristian R. Macias-Rocha  
PFC Kevin R. O'Neal  
PVT Alex M. Schumacher  
PFC Justin W. Smead

##### Class 13-011, September 20 11 Graduates

PV2 Brent K. Conley – DG  
PV2 Stephen G. Bailey  
PFC Lucas A. Bethune  
SPC Cavilyn D. Keown-Schaus  
PFC Brandon L. Lynema  
PVT Johnathan M. McCraw  
PFC Kevin L. Nass  
PV2 Mark R. Nyhus  
SPC Danny Rosado-Matias  
SPC Roberto E. Suarez  
PV2 Tre E. Webster

#### Aviation Operations Specialist (15P)

##### Class 13-031, August 2 9 Graduates

PVT Joshua Martel – DG  
PFC Samantha Hogset – HG  
PFC Talia Ames  
PV2 Austin Craig  
PFC Sarah Gaither  
PFC Kelsey Gaukel  
PVT Alex Maldonado  
PFC Caleb Mills  
PV2 Jose Sanchez

##### Class 13-032, August 9 12 Graduates

PV2 Jessica Peebles – DG  
PFC Dustin Schwinger – HG  
PFC Tatiana Brown  
SPC Jennifer Cantrell  
PV2 Clarence Collom  
PV2 Robert Geehreg  
PFC Trey Grumann  
PV2 Dionte Nathaniel  
PVT Blair Norwood  
PV2 Myraliz Ortiz-Rivera  
PFC Alexander Paul  
PFC Jarrod Plant

##### Class 13-033, August 16 9 Graduates

PFC Ashton Addington  
PFC Nicholas Artzner  
PVT Raymond Gustafson  
PVT Joshua Harper  
PVT Mathew Jespersen  
PV2 Morgan Satterfield  
PFC Earl Truzys  
PFC Mike Valladares  
PV2 Alexander Watson

##### Class 13-034, August 23 14 Graduates

PFC Olivia B. Vinzant – DG  
PFC Nicole M. Marshall – HG  
PVT Jasmine M. Augustus  
PVT Aspen M. Bauhs  
PFC Rickeshia N. Calhoun  
PVT Michael A. Carter  
PVT Iesha L. Collins  
PVT Cory J. Meyers  
PFC Bryan T. Moreno  
PFC Connor S. Murray  
PFC Alberto Rincon  
PVT Richard W. Wakefield  
PFC Torre R. Waldvogel  
PV2 Adam M. Wilcox

##### Class 13-035, August 29 8 Graduates

PFC Holly M. Lider – DG  
PV2 Brittaney R. Kendall – HG  
PFC James D. Bullock  
PVT Brandon D. Clark  
PVT Austin F. Reed  
PVT Tye R. Smith  
PV2 Jessica M. Stockinger  
PV2 Joseph E. Taylor

##### Class 13-036, September 6 11 Graduates

PFC Shantell M. Nimmons – DG  
PFC Christopher A. Shellko – HG  
PFC Tyler S. Brownson  
PVT Kayla N. Christel  
PV2 Briana Colon  
PVT Antwann J. Cullars  
PVT Dominique M. Joniaux  
PFC Julianne A. Prevost

PVT Antajuan Simpson  
PVT Giancarlo Valdez  
PV2 Esley Valentin-Crespo

##### Class 13-037, September 13 11 Graduates

PVT Je'Quan Cullors – DG  
PVT Ashley M. Aaron  
PV2 Andrew J. Donnelly  
PV2 Crystal M. Gonzalez  
PVT Brandon L. Hartman  
PFC Daniel Hernandez  
PV2 Tyree D. James  
PFC Jackelyn Pagan-Rivera  
PV2 Gabriel E. Rodriguez  
PVT Paul D. Swann  
PVT William T. Thompson

##### Class 13-038, September 20 14 Graduates

PFC Andrew T. Dillon\* – DG  
PVT Ian W. Brandt  
PFC Danean J. Coleman  
PV2 Peter Jay Ross A. Cruz  
PVT Joseph M. Dirig  
PVT Sadrack Joseph  
PFC Paige A. Hawkins  
PV2 Anthony Hostler  
PVT Shomays T. Maiava  
PVT Travis P. McClellan  
PFC Alfredo J. Mendez  
PVT Chelsea M. Morales  
PVT Duayne R. Peters Jr.  
PVT Jonathan E. Villarino

##### Class 13-039, September 27 11 Graduates

PFC Michael N. Marris – DG  
PV2 Scarlett M. Blaeser  
PVT Sammae R. Boyer  
PV2 Roberto J. Concepcion  
SPC Daniel S. Etheridge  
PV2 Latrell R. Foster  
PFC Anna M. Green  
PVT Jamal E. Pough  
PFC LaShundra L. Rivers  
PFC Christopher D. Tanner  
SPC Joel S. Turpin

#### Air Traffic Control (ATC) Operator (15Q)

##### Class 13-014, August 2 8 Graduates

PVT Jonathon Lander – DG  
PV2 Kenry Trowers – HG  
SPC Christian Johnson

PFC Peter Karol  
SPC Samuel Meinhart  
PV2 Talon Petersen  
PFC Joseph Pyle  
SPC Devin Steiner

##### Class 13-015, August 9 10 Graduates

SPC Tony Banks  
PV2 Whitney Bierilo  
PFC William Elliott  
PFC Michael Ferguson  
SPC Michaela Granada  
SPC Joseph Henson  
PFC Matthew Liebrecht  
PV2 Taylor Luellen  
PV2 Michael Rutherford  
SPC Vera Seurattan

##### Class 13-016, August 23 10 Graduates

PFC Erick C. Douglas – DG  
PV2 Rebecca M. Baca  
SPC Billy S. Bullock Jr.  
PFC Felicia V. Crespo  
PV2 Adria B. Davis  
PFC Oliver W. Dillingham  
PVT David S. Jumper  
PV2 Jason D. Payne  
PFC Seth T. Prox  
PFC Andrew C. Smith

##### Class 13-017, August 29 4 Graduates

SPC James T. Carroll – DG  
PFC Timothy P. LaVallee  
SPC Morgan P. Messina  
PV2 Craig L. Oliver

##### Class 13-018, September 13 10 Graduates

SPC Joseph T. Eley  
PV2 Tabatha N. Futch  
PFC Codylee C. Lacrosse  
SPC Patrick A. LeBourdais  
PFC Jeremy Q. Zachery

##### Class 13-019, September 20 10 Graduates

PFC Kourtney X. Martin – DG  
PFC Carl Dorff  
PV2 Michael B. Poindexter Jr.  
PV2 Salvatore J. Vicari IV  
SPC Mavia J. Williams

\* = AAAA Member

+ = Life Member

HG = Honor Graduate



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## Congress Returns from Summer Recess

As Congress returned from their summer recess following Labor Day, both the House of Representatives and Senate continue to face daunting fiscal dilemmas as the fiscal year came to a close and the Continuing Resolution (CR) remains unresolved leading to the current government shutdown. Currently Congress is addressing the two most pressing items at hand.

The House Republicans are challenging the funding for the President Obama health care plan directed in the Affordable Care Act (ACA) which commenced enrollment on October 1st of this year, while the Senate is moving forward with language within the CR that would prioritize payments in the event that the National Debt ceiling is reached.

With all of these challenges and no resolution in sight, the government was shut down as of October 1st, which includes the possibility of having the military report to duty without pay later in the month of October if the CR is not resolved, and causing over 800,000 government employees to be immediately furloughed without pay.

With much at stake, it is expected that the Senate may pass the CR even though the House language effectively defunds the ACA Concerning military pay and allowances, the original Senate amendment called for a 1.8% pay increase in Fiscal Year 2014 (FY14). The House provision only supported a 1% increase and based on the need to draw certain concessions, the pay raise will likely end up at 1%.

On the second day of the government shutdown, President Obama called key ranking members from both the House and the Senate to the White House in the hope of coming to some sort of compromise within the next several days. There is no doubt that President Obama will not tolerate the de-obligation of funds to support the ACA since this was one of his core tenants he campaigned on prior to being elected into his first term.

Despite the shutdown, DoD will still be required to have 1.4 million essential government employees and 1.3 million essential military personnel to continue to report for duty. Although the law stipulates that these essential personnel must be paid, it does not specifically provide a timeline for when these payments will be made.

For military personnel in general, all



## LEGISLATIVE REPORT

By COL (Ret.) William H. Morris

AAA Representative to The Military Coalition (TMC)

will receive their pay on October 1st; however, the follow-on payments may be at risk depending on when a CR would be passed. Based on the date of approval, the CR must be approved not later than October 7th for military members to receive their mid-month pay on the 15th.

As far as the Veterans Administration (VA) is concerned, all services remain operational during the government shutdown to include VA medical facilities and some administrative offices. All benefit checks will continue to be issued but applications for benefits will temporarily be stopped until the VA receives normal funding outlays once the CR is validated.

The looming crisis on the horizon is not necessarily the October 1st CR expiration date which triggered the government shutdown, it's the fact that the Treasury Department could run out of cash sometime by the end of October. In this scenario, the department would likely make interest payments to U.S. Government Debt bondholders, checks for social security recipients, government workers and military members.

Finally with all of the other elements at play within Congress it is likely that the National Defense Authorization Act (NDAA) for 2014 will be potentially delayed until the late November / early December timeframe. The late year approval of the NDAA seems to be a trend as the last two NDAs (2012/2013) were approved in the month of December.

### Warrior Care

The DoD Office of Warrior Care Policy provides a wealth of information and an interactive Warrior Care Blog which informs disabled veterans and their families about vast resources and information providing assistance to those in need. Recently a new caregiver resource directory has been released with valuable information to those wounded veterans requiring home caregiver support.

Those interested in more information should visit their web page at <http://warriorcare.dodlive.mil/>; a hard copy can be requested by email to [info@nrd.gov](mailto:info@nrd.gov).

You will receive a copy of this resource in approximately two weeks.

### DoD Leadership Warns of Continued Cuts

OSD Comptroller Robert Hale at a September 5th meeting of the Reserved Forces Policy Board stated that pay raise freezes and troop reductions would be the norm as the DoD moves forward to meet required cuts under sequestrations.

Although he acknowledged that the Army and Marines would face the brunt of the troop reductions he failed to point out that the Navy and Air Force would see their fair share of reductions as well.

Mr. Hale and others in OSD continue to champion reductions in pay raises and compensation as a measure to help manage the expanding personnel costs which comprise the largest portion of the DoD budget.

The 1% pay raise that OSD has submitted is facing opposition from some members of Congress and if it were to prevail it would be the first time that military pay raises would be below the Employment Cost Index (ECI) since 1998. Mr. Hale's most notable quote was "I think we will go after military compensation aggressively," signaling that after 12 years of persistent conflict the support of initiatives to take care of service members and their families has changed significantly in light of the current fiscal crisis.

The Military Coalition, of which AAA is a member, recently sent a letter of concern to both the Chairman of the Senate and House Armed Services Committee to reconsider the challenging cuts of Sequestration and to urge them not to agree with the 1% pay raise and support the Senate's version of the Continuing Resolution which would provide for a 1.8% raise.

## New Members

### Air Assault Chapter

CW5 John Joseph Blank Jr.  
CW5 Thomas Clark  
CPT Nicholas Craig  
SFC Michael S. Felcher

### Aloha Chapter

SFC Cesar A. Ramirez II  
MAJ Matthew Scher

### America's 1st Coast Chapter

WO1 Christopher E. Dennis  
MSG Wilfredo Figueroa Jr.  
1SG John Elliott Hoff Jr.  
CW3 L. Robert Lyman  
CPL Robin E. Merkle  
CW2 Mark Prewitt

### Arizona Chapter

MAJ Kenneth Darnall

### Aviation Center Chapter

WO1 Paul B. Angeleo  
SFC Kenneth C. Ashline  
WO1 Richard S. Boggs  
2LT Thomas R. Brown  
WO1 James T. Brzezinski  
WO1 Brant C. Bump  
WO1 Harold F. Caro  
2LT Sean M. Carson

WO1 Michial J. Cebe  
WO1 Sun Min Chun  
2LT Jeremy N. Cook  
CPT Curtis G. Cullen  
2LT Benjamin D. Dagg  
WO1 Christian M. Davis  
2LT Jordan M. Dosch  
2LT Rakesh Dubey  
WO1 Clark B. Eliason  
WO1 Matthew J. Glasscock

2LT Stuart J. Godlasky

2LT Patrick R. Gunn

WO1 Charles H. Hackett

2LT John J. Heisler

2LT James T. Howarth

WO1 Zackery N. Huffman

2LT Jared J. Joyce

SGM Dexter L. Kimble

CPT Bradley K. Kistler

2LT Anthony J. Lechanski

WO1 Matthew D. Linton

WO1 Spencer A. Luke

CPT Thomas J. McCarthy Jr.

2LT Christopher R. McCurnin

WO1 Robert S. McLeod

2LT Marc J. Miller

WO1 Jeremy E. Minton

2LT Aaron C. Olson

2LT Brittany J. Pearson

2LT Daniel L. Petterson

WO1 James H. Rogers

WO1 Antonio R. Schlee

MAJ Juan Carlos Segura

WO1 Stephen R. Tucker

WO1 Ryan J. Vanderpool

2LT Jana R. Welch

2LT Breanna Westman-Evans

2LT Christopher L. Youhouse

### Badger Chapter

SGT Joshua P. Veldboom

### Bavarian Chapter

CW3 William T. McKenna

### Central Florida Chapter

SPC Kevin J. Mauter

Gary Schmidt

Terri Smith

CW2 Jason Richard Todd

### Colonial Virginia Chapter

SSG Robert E. DeShazo

MAJ Brant Edward Kananen

### Delaware Valley Chapter

CW2 Luisa Y. Sanchez

### Embry Riddle Eagle Chapter

CW5 Jay Burke

### Flint Hills Chapter

SPC Javier A. Ortiz

### Frontier Army Chapter

MAJ Sherdrick Rankin

### Greater Atlanta Chapter

Sallyl W. Buglass

MAJ Johnny L. Helms, Ret.

1LT Travis Holmes

PFC John Marsteller

TSgt Gary L. Winter

### Griffin Chapter

CW3 Milam Jeans

### High Desert Chapter

CPT Jason Birkle

### Iron Mike Chapter

CSM William John Yeargan

### Jack H. Dibrell/Alamo Chapter

SSG Glen D. Blevins

CPT Guillermo Cardona

CPT Monique Culver

SGT Jason J. DeLeon

CW2 DJ Eilers

SFC Ronald L. Hill

CW4 Robert L. Martinez

SGT David Floyd Polinsky

MAJ Delvern P. Royal

SFC Garth L. Sloan

### Jimmy Doolittle Chapter

1LT Sean Brookshire

### Keystone Chapter

1LT David William Smith

### Land of Lincoln Chapter

1LT Brian Willey

### MacArthur Chapter

CW4 Neal L. Humphries

MAJ Kathy D. Humphries

Mr. Robert Moss

### Magnolia Chapter

1LT Jeremiah R. Malmberg

### Minuteman Chapter

SPC Luis Cortez Jr.

SPC Brett M. Hurley

SSG Christy M. Kupiecfox

SGT Jason L. Scott

### Morning Calm Chapter

1LT Keary Q. Salls

### Mount Rainier Chapter

MAJ Ryan Yedlinsky

### North Country Chapter

MAJ Adam Ryan Bock

CW3 Edward ONeal Smith

### North Star Chapter

CW2 Corey W. Cassavant

CW2 Ronald J. Chapman

### North Texas Chapter

SGT Josue A. Ayala

CW3 Michael D. Crowley

SPC Jose M. DeJesus

SPC Gorge T. Devore

SGT Eric Gartman

Howard Daniel Horton

SPC Latory Jackson

SPC Lurtina M. Jones

SSG Jeff G. Knoles

SSG Doald V. Leach

SSG Rick V. Lynn

SPC Ryasn L. Mendenhall

SPC Ruby Montoya

CW2 Randolph S. Robinson

SPC Stephen P. Sample

PFC Andrew R. Tollison

PFC Seth Turrubiarte

PFC Dashinee S. Womack

### Pikes Peak Chapter

LTC John Wesley Mims, Ret.

### Ragin' Cajun Chapter

CPT Travis Easterling

CW3 Travis M. Haney

### Rio Grande Chapter

1LT John Bockmann

MAJ Nicholas Ryan

### Rising Sun Chapter

Angie D. Hinkle

Yagi Hiroaki

COL Makoto Hoshino

LTC Kzuo Obata

Takafumi Shibuya

Mitsuharu Sone

### Savannah Chapter

MAJ Craig A. Blow

CW4 Jason Dunnam

### Tarheel Chapter

SFC Brian Nelson Avery

SPC Brian J. Bertram

SFC Scott Ringenbach

### Tennessee Valley Chapter

Brian Cooper Bouma

Tracey Hansen Howard

Shane Lege

Jesse Lesperance

2LT Eric Q. McClure

Joan Reichwein Smith

Lesa Valleroy

SFC Christopher Wolsifer Sr. Ret.

### Volunteer Chapter

CW3 Donnie R. Anderson Jr.

CW2 Patrick J. Coleman

SPC Nathan C. Colvin

### Washington-Potomac Chapter

CW5 Michael T. Bartin

SGT Earle Heusinger III

MAJ Michael Rigney

1LT David William Smith

### No Chapter Affiliation

SFC Robert Aldrete

CW4 Thomas V. Bates

SPC Rowdy L. Blackmon

SGT Steven E. Bohanan

WO1 Darrick Coriz

MSG Oscar B. Crober

SSG Stephen Daniels

CW2 Michel Drake

SSG Russell J. Ficek

SPC Brian Gieselman

SPC Matthew P. Golden

CPT Stephen Kempf

CW4 Chris Kurtz

CPT Matt McCann

CW2 Jason McDowell

SPC Derek R. Mercer

SSG Neil V. Rerucha

SGT Grant J. Roary

CW4 Matthew Alan Sheridan

Olivia Smith

Kayce E. Smith

MAJ Kurt Southworth

SGT Alexis Torres Sr.

Joan Versey

SFC Warren T. Whiteford

### Lost Members

Help us locate a member on the lost list and receive a free one month extension to your

AAAA membership!

SGT Stephen Alston

1LT James R. Antonides

SGT Austin S. Appelman

SPC David Aragon

SSG Chad Badgett

PFC Richard Barlow

SPC Callie Barnum

SPC Jordan Batt

SFC Becky J. Belsma

SFC Brian W. Belsma

SPC David Blackmon

SPC Anthony Blevins

SPC Robert Blevins

SFC Gregory Bolton

SGT Sarah Brant

CW4 Tom Brautigan

SFC Kristl Bray

SPC David Brown

2LT Jesse R. Brown

SPC Travis Brown

Marco Budinich

SPC Troy Bullard

SFC Brant Burnham

CW3 James D. Cain, Ret.

1SG Jorge R. Cantu

PFC Shyane D. Canzonori

SPC Nikolas Carly

SPC Chad Carson

SPC Brett Cheney

SPC Aaron G. Clark

Martin Coenson

SPC David Conrad

SSG Tyler Coombs

CPT Christopher Corkery

SSG Jade Cowley

SPC Thomas Daniels

SPC Demain D. Delaney

PFC Courtney Dennis

SPC Tracee Deubler

SGT Matthew DiBiase-Dailey

MSG Donald Dussetschleger

SPC Francoise Lapira Erni

1LT Mark A. Evans

CDT Bruce Vincent Federico

SGT Glen Ferguson

SGT Lachelle Fitisemanu

SPC Cameron P. Fleetwood

SSG Sunia Fonua

SGT Carlos S. Garcia

SSG Nathan D. Garlach

CW2 Matthew Garrand

CW4 Daniel Giles

William H. Gillispie

PFC Jenna L. Goodspeed

CPT Matthew Green

1SG Abdel Farid Guzman

SPC Steven Hatch

SGT Stewart Hatch

SPC Taylor Haycock

SPC Michael Herdegen

PFC Shane Higgins

CW3 Kevin Matthew Hogue

SSG Ronald Holland

SPC Jordan Holt

SPC Johnathon D. House

SSG Nicholas Hunt

1SG Joel Hutchings

CPT Robert Hyatt

SSG Joshua A. Jessie

SSG Michael A. Johns

SPC Chad R. Kemp

SGT Shannon Knorr

CW2 Kenneth E. Lett

SPC Randy A. Little

SSG James Logan

SPC Bryan Lopez

SPC Jesus Lopez

SSG Paul Madsen  
 SGT Aaron Malone  
 2LT Chad Marden  
 SPC David Marler  
 SGT Kenneth McWilliams  
 CPT Stephen W. Miles  
 SGT Tyler Miller  
 SSG Zackery Mitani  
 SPC Jose Moncada  
 SSG Ryan Moser  
 Chanina Murry, Ret.  
 2LT Scott Neilson  
 1LT Richard W. Nicholson  
 CPT Matthew R. Nicol  
 SPC Steven Nielsen  
 SGT Terrance Nielson  
 SPC Joseph Novosel  
 SSG Jose Pantoja  
 SPC Eugene D. Patton  
 SGT Mark Peterson  
 SSG Brett Pierce  
 CW2 Erik Price  
 SPC Thomas Privett  
 SSG Mario Raymundo  
 CW2 Mark C. Reed  
 CDT Trevor T Reed  
 SPC Tarik V. Register  
 SPC Jerett Richens  
 SPC Andrew Riggs  
 CW2 Edwin X. Rivas  
 SPC Melony R. Robinson  
 SPC Todd Rosenlund  
 SPC Brian Rowley  
 SPC Mark Searcy  
 SPC Kyle Simmons  
 SPC Michael G. Simmons II  
 1SG Bryan Smethurst  
 PFC Demetrius R. Smith  
 SPC Kevin Michael Smith  
 SPC Robert Snarr  
 SPC Trient Spires  
 SGT Joshua R. Steadman  
 COL William W. Stevenson, Ret.  
 PFC William R. Stoneham  
 SGT Alexander Stoor  
 PFC Steven Tamayo  
 SGT Travis Taylor  
 SGT Edward M. Thorne  
 1LT Terry Thornton  
 SGT James Turner  
 SGT Edin Vajovic  
 CW2 Joseph Vandrimmelen  
 SGT John M. Vasquez  
 SSG Douglas Ware  
 James L. Watson  
 SGT Carrie Weatherspoon  
 MAJ Lance Webb  
 Hans Weichsel  
 SPC Nathan Wilcox  
 SFC Dallas Wilkerson  
 CW2 William Woodward  
 SPC Alma Worthington

## AAAA Chapter News

### Bavarian Chapter

PHOTO BY SPC JEANITA C. PISACHUBBE, 1AD CAB PUBLIC AFFAIRS



The Bavarian Chapter recently made a \$2,500 donation to the Landstuhl Fisher House after raising the money during its annual Valentine's Day rose sale on Feb. 14, 2013 outside the PX at Hohenfels, Germany. Chapter members joined president, LTC John Knightstep (4th right from flag pole), in front of the Landstuhl Fisher House to present the check to Fisher House representative, Mrs. Doria Rey (2nd right from flag pole).

### Minuteman Chapter

CHAPTER COURTESY PHOTO



The Minuteman Chapter hosted the 7th Annual CW3 Terry Knight Memorial AAAA Golf Tournament on Sep. 23, 2013 at East Mountain Country Club in Westfield, MA. All proceeds went to the chapter scholarship fund. The winners of the tournament were (left to right): William Hurley; his son, Jason Hurley, Doug Lambert, and William's other son, Brett Hurley who is a specialist in the Massachusetts Army National Guard.

### North Texas Chapter

CHAPTER PHOTO BY CLARE MCCARREY



Seven foot tall Elvis meets the North Texas Chapter longhorn, T-Bone, with Bonnie Reininger, wife of chapter VP Awards, LTC (Ret.) Terry Reininger, at the 2013 AAAA Annual Professional Forum and Exposition in Fort Worth, TX. She is an avid volunteer for the chapter and was instrumental in helping the AAAA North Texas

Chapter Board during the event, taking pictures of attendees with T-Bone and then emailing them out following the event.

### Oregon Trail Chapter



On Sep. 6, 2013, the Oregon Trail Chapter of the Army Aviation Association of America hosted the first ever (but soon to be annual) all ranks golf outing at Meadowlawn Golf Course, Salem, OR and it was a smashing success! Forty players participated in the scramble which was a "no cost" event for junior enlisted team members thanks to a generous donation from AAAA National as we work to get our chapter up and running again. Seven new members signed up to join the chapter and, during the quarterly AAAA meeting which followed the event, 27 current members (our largest turnout ever!), along with the new pledges, began planning two future events – a "Texas Hold'em" tournament for the winter quarterly meeting, and a second annual golf tournament to be held in conjunction with the Oregon National Guard Association's Officers Convention in Bend, Oregon in late April. Also special thanks go to Team Traeger, who donated a highly coveted Traeger "Lil-Tex" Barbeque, to be used as Texas Hold'em tourney's grand prize during our next event!

### AAAA Supports Army Aviation Museum Fundraiser



AAAA National President, BG (Ret.) Howard W. Yellen (second left) and his teammates, (left to right) SSG Shawn H. Thurman, 1st Bn., 14 Avn. Regt.; Yellen; SFC Bryan E. Clancy, NCO Academy; and SPC Frank D. Rovito, Jr., 1st Bn., 11th Avn. Regt. pause for the Kodak moment with Army Aviation Museum Foundation Chairman, LTG (Ret.) Dan Petrosky, at the Silver Wings Golf Course, Fort Rucker, AL on Sep. 20, 2013. AAAA sponsored a foursome and a hole for the Army Aviation Museum Annual Golf Tournament fundraiser.

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

### Colonial Virginia Chapter

CHAPTER PHOTO BY WILLIAM D. SWARTZ



**COL Dean D. Heitkamp**, commander of the 128th Avn. Bde., is inducted into the Silver Honorable Order of St. Michael by Colonial Virginia Chapter president, LTC (Ret.) Mark S. Jones, at Joint Base Langley-Eustis, VA on July 16, 2013 in conjunction with his change of command. Heitkamp was recognized for his outstanding service to Army Aviation in activating the 128th Avn. Bde. and leading the transition from the U.S. Army Aviation Logistics School to the new brigade structure. He moves to Fort Bragg, NC and his next assignment as deputy commander of the U.S. Special Operations Aviation Command.

CHAPTER PHOTOS BY CW2 JAMES LAWRENCE



Colonial Virginia Chapter president, LTC (Ret.) Mark S. Jones, inducts **CW2 Alexander Gonzalez**, executive officer, Co. B., 1st Bn., 222nd Avn. Regt. (above photo) and **SFC Brandon Fank**, senior platoon sergeant in B/1-222nd Avn., (below photo) into the Bronze Honorable Order of St. Michael at a ceremony



at Joint Base Langley-Eustis (JBLE), VA on Aug. 9, 2013. Both were recognized on the occasion of their change of duty for outstanding leadership and performance in their current duties. They will remain at JBLE where Gonzalez will become an instructor at the Warrant Officer Basic Course and Fank will assume the responsibilities of senior platoon sergeant.

CHAPTER PHOTO BY SSG (RET) WILLIAM SWARTZ



**SGM Eric Goolsby**, a department chief at the 128th Avn. Bde., is inducted into the Bronze Honorable Order of St. Michael by 128th Avn. Bde. commander, COL Dean Heitkamp (left), and Colonial Virginia Chapter president, LTC (Ret.) Mark S. Jones (right), during a ceremony on Jul. 10, 2013, at Joint Base Langley-Eustis (JBLE), VA. Goolsby was recognized on the occasion of his retirement for the culmination of a highly successful 24 year military career while serving in positions of responsibility within the United States Army Aviation Logistics School and 128th Avn Bde. He will be a performance coach for Newport News Shipbuilding in Newport News, VA.

### Flying Tigers Chapter

CHAPTER PHOTO BY RENEE BRIDGES



BG Peter Quinn (left), deputy commanding general of the 84th Training Command and former commander of the 11th Aviation Command (U.S. Army Reserve), inducted **COL Michael G. Schellinger**, deputy commander of the 11th Avn. Cmd., into the Silver Honorable Order of St. Michael during his retirement ceremony on Jul. 12, 2013 at Hangar One on Godman Army Airfield, Fort Knox, KY. Schellinger's wife, **Dr. Megan Schellinger**, was inducted at the same ceremony into the Honorable Order of our Lady of Loreto while their children, Margo and Sheamus, looked on. Schellinger will continue flying for Delta Airlines following his retirement.

### North Texas Chapter

U.S. ARMY NATIONAL GUARD PHOTO BY LAURAL LOPEZ



COL Travis Richards, 36th Combat Aviation Brigade Commander-Rear, Texas Army National Guard, inducts **CW5 Joong H. 'Chuck' Kim**, State Aviation Maintenance and Material Officer, Texas Army National Guard, into the Silver Honorable Order of St. Michael during his retirement ceremony at Camp Mabry in Austin, TX, July 25, 2013. Kim served more than 42 years in the U.S. Army with 28 of those years in the Texas Army National Guard and is a Master Army Aviator with over 8,000 flight hours in various types of military helicopters.

### Rio Grande Chapter

U.S. ARMY PHOTO BY SPC JEANITA C. PISACHUBEE



**LTC Josephine Thompson**, outgoing commander of Co. C (MEDEVAC), 2nd Bn., 501st Avn. Regt., is inducted into the Bronze Honorable Order of St. Michael, by 1st Armored Division Combat Aviation Brigade commander, COL Carey M. Wagen, during a Sep. 20, 2013 ceremony at CAB headquarters on Fort Bliss, TX. Thompson was recognized for her more than 14 years of exceptional performance in MEDEVAC positions on the occasion of her change of duty. Thompson moves to Joint Base Lewis-McChord where she will serve as the chief of operations for the Western Regional Medical Command's Readiness Division.

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# AAAA: Supporting the U.S. Army Aviation Soldier and Family



COL Lonnie G. Hibbard, then commander of the Cbt. Avn. Bde., 1st Armored Div., inducts MAJ Paul B. Eberhardt, brigade operations officer, into the Bronze Honorable Order of St. Michael during a Jul. 17, 2013 ceremony at the CAB headquarters, Fort Bliss, TX. Eberhardt was recognized on the occasion of his impending change of station to Schofield Barracks, HI, for his successful taking of the unit from BRAC move, through the personnel and equipment reset, while simultaneously planning and preparing for inspections, five CTEs and deployment.



SFC Conception Garza, 1SG of Co. C, 2nd Bn., 501st Avn. Regt., is inducted into the Bronze Honorable Order of St. Michael by 1st Armored Div. Cbt. Avn. Bde. commander, COL Carey M. Wagen, during a Sep. 20, 2013 ceremony at the CAB headquarters in Fort Bliss, TX. Garza was recognized for his more than 16 years of exceptional MEDEVAC service in all noncommissioned officer leadership positions he has held. His next assignment is as the operations sergeant at William Beaumont Army Medical Center, El Paso, TX.

ceremony. His wife, **Tracy Dwyer**, (right below) was inducted into the Honorable Order of Our Lady of Loreto during the retirement ceremony for her dedicated support to Army Aviation.



## CFC • CFC • CFC • CFC • CFC • CFC

**Please support the one Association that provides annual scholarship support to hundreds of students seeking higher education.**



The AAAA Scholarship Foundation, Inc. provides a variety of scholarships and no-interest loans to the Soldiers, NCOs, warrant and commissioned officers and to their family members. Your tax-deductible donation helps make a difference to those looking to further their educational opportunities and experiences. Please contribute to the AAAASF through the Combined Federal Campaign program.

**Contribute to #10516.**

Please see your unit CFC representative for details on participating in the 2014 CFC Program.

The AAAA Scholarship Foundation, Inc.  
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MAJ Joseph C. James, adjutant for the Cbt. Avn. Bde., 1st Armored Div., is inducted as a Knight of the Honorable Order of St. Michael, by then-brigade commander, COL Lonnie G. Hibbard during a ceremony on Jul. 17, 2013, at the CAB headquarters in Fort Bliss, TX. James was recognized for ramping up the S1 functions from 250 Soldiers to a full CAB of 2577 Soldiers in 120 days – setting the standard for the division in several personnel areas. He remains at Fort Bliss for his next assignment with the 1st Armored Div. G-1.



LTC Gerald Dwyer (right) was inducted into the Bronze Honorable Order of St. Michael, by COL Thomas Todd (left), Project Manager for Utility Helicopters and vice president of the AAAA Tennessee Valley Chapter, during Dwyer's retirement ceremony July 25 at Redstone Arsenal, AL. Dwyer culminates 26 years of military service, last serving as the Special Projects lead and head of divestiture planning for the UH-60A Black Hawk. He was also recognized with the Legion of Merit during the



## Post Career Employment Program (PCEP) website – A unique benefit for all AAAA members.

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The Post Career Employment Program serves two AAAA member groups; AAAA Individual Members retiring or leaving active service, and AAAA Industry Members seeking highly qualified soldiers to enhance their work force. For our members it clearly demonstrates that AAAA is the professional organization that supports all ranks and Army Aviation specialties. For our Industry Members we offer opportunities to access highly-skilled and disciplined personnel who can be productive members of their work force.

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## In Memoriam



FAMILY PHOTO

### Colonel William Edward Crouch Jr., Retired

COL (Ret.) William E. "Bill" Crouch Jr., passed away on

Sep. 19, 2013 in Panama City, FL. He was 83.

Graduating from the U.S. Military Academy at West Point with a commission in the field artillery in 1951, he attended flight school in 1960 and served 3 years with the U.S. Army Aviation Test Board. He served 4 tours in Vietnam to include command of the 9th Avn. Bn., 9th Inf. Div.; Executive Officer, 17th Avn. Gp., and command of the 101st Avn. Gp., 101st Airborne Division (Airmobile).

Following attendance at the U.S. Naval Test Pilot School, he was assigned to the U.S. Army Aviation Test Activity at Edwards Air Force Base, CA, where he served as an experimental test pilot, Chief of Flight Test Engineering, and later deputy commander. He served in the Pentagon as Chief of the Airmobility Division (later reorganized as the Aviation Systems Division) in the Office of the Deputy Chief of Staff for Research, Development, and Acquisition until July 1977.

He concluded his military career in 1981 as commander of U.S. Army Aviation Development Test Activity in Fort Rucker, AL and continued to work with Army Aviation as a member of industry until his retirement in 1993.

His awards included the Legion of Merit with three Oak Leaf Clusters (OLC), the Distinguished Flying Cross with OLC, the Bronze Star Medal with "V" device for Valor and three OLCs, 32 awards of the Air Medal, and the Army Commendation Medal with "V" and OLC.

After retirement, he moved to Panama City Beach, FL and began service with the U.S. Coast Guard Auxiliary, eventually achieving the rank of Commodore. A life member of AAAA, he was a former National

Vice President, and president of the Washington-Potomac Chapter .

A memorial service was held, Sep. 28 in Panama City and his remains will be interred with full military honors at Arlington National Cemetery at a later date.



FAMILY PHOTO

### Lieutenant Colonel Norman George Laumeyer, Retired

AAAA Charter Member, LTC (Ret.) Norman G.

Laumeyer, 84, of Enterprise, AL, passed away on Aug. 7, 2013 at Medical Center Enterprise.

He enlisted in the Minnesota National Guard in 1946, in the Air Force in 1947, and in the Army in 1951 to attend Infantry Officer Candidate School. Following graduation and commissioning, he completed airborne and Ranger school and graduated from flight school in 1955, serving two combat tours in Vietnam in the 1960's.

While serving the military, he earned many awards including the Bronze Star, Meritorious Service Medal, and 16 Air Medals. A Master Army Aviator with more than 3,400 hours, he retired in 1970 with 23 years of service.

Following his military retirement, he worked as a Department of the Army training specialist from 1972 until 1994 at Fort Rucker, AL where he earned a Superior Civilian Service Award. He lived in Daleville for 40 years where he was president of the Daleville School Board.

He was a charter member of AAAA having joined in 1957 and was president of the Fort Rucker chapter of AUSA in 1992.

A funeral mass was conducted on Aug. 13 at St. John Catholic Church in Enterprise, AL and he was buried with full military honors immediately following in Meadowlawn Cemetery.



U.S. ARMY FILE PHOTO

### Brigadier General Leo Eugene Soucek, Retired

BG (Ret.) Leo E. Soucek passed away on Apr. 2, at Walter

Reed National Military Medical Center after a long fight with chronic obstructive pulmonary disease. He was 84.

A Virginia Military Institute graduate, he served as a combat engineer during the Korean War prior to attending flight school. He was literally the first man to report to the 227th Assault Helicopter Battalion, the Army's first air-assault battalion of its first air assault division, the 11th Air Assault Division (Test), and, as the XO, helped build the unit from the ground up.

The 11th was later re-flagged as the 1st Cavalry Division, the Army's first Airmobile Division, at Fort Benning, GA in 1965. Soucek flew more than 6,000 hours, to include 3,000 combat hours in Vietnam where he commanded the 11th Cbt. Avn. Bn., the 11th Cbt. Avn. Gp., and the 164th Avn. Gp.

His final aviation assignment was as the commanding general of the U.S. Army Primary Helicopter Center and School at Fort Wolters, TX. He retired from the Army in 1974 after having served as commander of the Army section of the military assistance advisory group in Tehran, Iran.

His awards included the Silver Star, Distinguished Service Medal, four awards of the Legion of Merit, six awards of the Distinguished Flying Cross, two Bronze Star Medals, 85 awards of the Air Medal, and a Purple Heart.

He subsequently served in a civilian capacity in Iran as Middle East director of operations for Martin Marietta, settling in Potomac, MD in 1980 and working as a consultant for Martin Marietta and later for Lockheed Martin before retiring in 1996.

A life member of AAAA, he was buried with full military honors at Arlington National Cemetery Sep. 10, 2013.



# AAAA: Supporting the U.S. Army Aviation Soldier and Family

Remember the AAAA Scholarship Fund in your end-of-year donations. 100% of your donation goes to our soldiers and families!



## Thank You! Our Scholarship Fund Donors



AAAA recognizes the generosity of the following individuals, chapters and organizations that have donated to the Scholarship Foundation General Fund since the beginning of the year. The General Fund provides funding to enable the chapter, corporate, heritage and individual matching fund programs as well as national grants and loans. 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! 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.



APR PHOTOS BY RENEE BUDIZ

AAAA Scholarship Foundation, Inc., president, Connie Hansen, and Foundation fundraising chair, COL (Ret.) Lou Bonham, accept donations for the General Fund during a reception prior to the AAAASF 50th Anniversary Banquet on Sat., Apr. 13, 2013, at the Fort Worth Convention Center, Ft. Worth, TX from: (left photo) BG (Ret.) Steve Mundt (left), vice president for business development at EADS North America and Marc Paganini, president and CEO of American Eurocopter; and (right photo) LTG (Ret.) Dan Petrosky, then-national president of AAAA.

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## New Order of St. Michael Recipients



### Bronze

1SG Timmy Shelton  
MAJ Ryan Boyle  
SFC Jeremy West  
SFC James Byrd  
Tommy W. Filler  
SSG Robert L. Smith  
John (Jack) Harry  
1SG Jimmey L. Mygatt  
Alexander Tejada  
CW4 Rolando Sanchez  
Dennis A. Kandel  
SFC Kelvin A. Coley  
MSG Harold T. Sullivan Jr.  
SFC Jeffrey P. Bailey  
1SG Craig Petronella  
SFC Andrew Lamarre  
SFC Lis Waldemar  
SGM Eric Goolsby  
1SG Victor Colon  
1SG Gilberto LopezRuiz  
1SG Jon D. Frerichs  
CW4 Robert M. Wagner  
CW2 Alexander Gonzalez  
SFC Brandon Fank  
CW4 James E. Morrow III  
SGM Crystal L. Turner  
CW4 Michael T. Bollen  
CW3 Scott H. Durrer  
CW4 Alvaro Flores  
CW3 Joe N. Hudson III  
CSM Steven D. Odom  
CW4 David P. Peveto  
CW5 Angel L. Reyes Jr.  
CW5 Christopher C. Good  
LTC Bruce C. Balzano  
SFC Concepcion Garza  
CW3 Victor Gallegos  
MSG Oscar Esquibel  
SFC Greg Holmes  
MAJ Paul M. Wuensch

1SG Jason Crowley  
SFC Bradley J. Boss  
CPT Clinton R. Woody

## New Our Lady of Loreto Recipients



Michelle P. Evans  
Lisa M. Mannion  
Cindy DeAnda

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### Air Assault Chapter

President,  
COL Thomas Drew  
VP Memberships,  
CW5 John Blank  
Secretary,  
MAJ Chris Chung  
Treasurer,  
MAJ Connie Lane  
VP Programs,  
CW4 Terry Horner  
VP Scholarship,  
MAJ Robert Spara

### America's First Coast Chapter

President,  
COL James D. Lord  
Senior VP,  
LTC(R) William Mignon  
Secretary,  
CW2 Stacey L. Jaffett  
Treasurer,  
LTC William Temple  
VP Membership,  
CW4 Ray Freeman  
VP Social Events,  
CW4 Brian Ferrell  
VP Scholarships,  
CW4 Sean Hogan  
VP Fundraising,  
CPT Brian Cooper  
VP Awards,  
CW4 Tim Dehner  
VP Enlisted Affairs,  
SFC John Hoff

### Delaware Valley Chapter

Secretary,  
Edward C. Hassiepen

## Mount Rainier Chapter

President,  
COL Paul A. Mele  
Senior Vice President,  
LTC Chad E. Chasteen  
Secretary,  
MAJ Ryan E. Yedlinsky  
VP Awards,  
MAJ Ralph L. Becki

## Oregon Trail Chapter

Senior Vice President,  
CW4 Paul Zenchenko  
Treasurer,  
MAJ Rob Hagerman, Ret.

## NCO of the Month

SGT Jason L. Scott  
August 2013  
*Minuteman Chapter*

## NCO of the Quarter

SGT Joshua P. Veldboom  
4th Quarter  
*Badger Chapter*

## Soldier of the Month

SPC Rowdy L. Blackmon  
August 2013  
*Thunderbird Chapter*

## Distinguished Instructor

SSG Keith R. Butterbredt

## ACES

LTC Robert R. Keeter  
*Aviation Center Chapter*

CW5 Dale A. Yoder  
*Keystone Chapter*

## New Lifetime Members

COL Vincent C. Carnazza Jr.  
MAJ Bryan K. Cohoon  
CW3 Thomas G. Evans Jr.  
CW4 Brian J. Hoover  
Howard D. Hortin  
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CW4 Buddy Liggenstoffer, Ret.  
MAJ Matthew K. Moore  
MAJ Kenneth M. Slye, Ret.

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## In Memoriam

Daniel J. Rubery  
A. G. Stravato



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## UPCOMING EVENTS

### January 2014

- Jan. 8-10 AUSA Aviation Symposium & Exhibition, National Harbor, MD
- Jan. 10 AAAA SFI Executive Committee (Conference Call) Meeting, Arlington VA
- Jan. 11 AAAA National Awards Committee Selection Meeting, Arlington, VA
- Jan. 27-29 Aviation Senior Leaders Conference, Fort Rucker, AL

### February 2014

- Feb. 12-13 Joseph P. Cribbins Aviation Product Symposium, Huntsville, AL
- Feb. 26-28 AUSA Winter Symposium, Huntsville, AL

### March

- 1-4 HAI Heli-Expo, Anaheim, CA

### May

- 1 AAAASFI deadline for receipt of all completed scholarship applications
- 4-6 2014 Army Aviation: Mission Solutions Summit, Nashville, TN

## ARMY AVIATION UPCOMING SPECIAL FOCUS



### NOVEMBER

- Unmanned Aircraft Systems
- Air Traffic Services



### DECEMBER

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

Contact: Bob Lachowski  
Advertising Director  
Tel: (203) 268-2450 x 131  
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## ARMY AVIATION ASSOCIATION OF AMERICA

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**PLEASE NOTE:** Effective 1 January 2011 the monthly USAWOA NEWSLINER will be delivered electronically. If you wish a paper copy via mail please check here  and include an additional \$12 per year with your dues payment.

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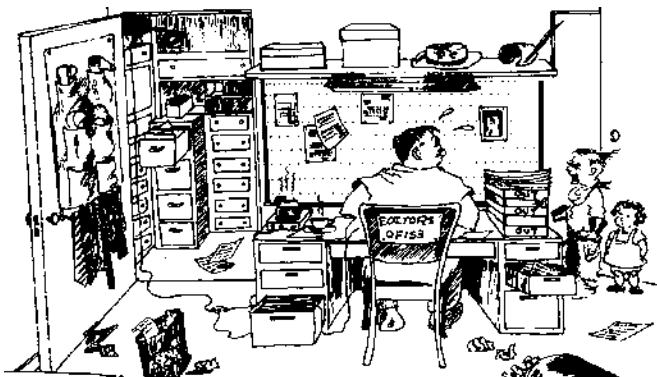
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# Art's Attic

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.

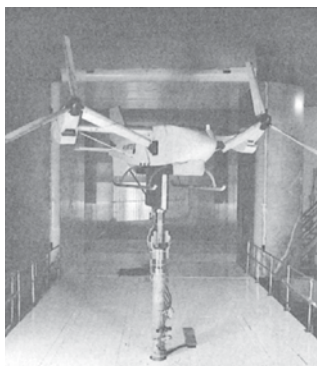


## 25 Years Ago October, 1988

### Bell-Boeing Pointer UAV

The world's first tilt-rotor unmanned air vehicle (UAV) has begun wind-tunnel tests in Philadelphia. The Pointer meets DoD short-range

requirements (150-300 km range). First flight is expected later this year at the Bell facilities in Texas.



### Underwater Egress Training

CW2 James Jarvis and SGT Mark Smith, G Company, 123rd Aviation, Ft. Richardson, AK, have come up with a device that will enhance the survival of aviators when landing in the water. The Underwater Egress Training device or "Dunker," is a low-technology attempt to improve unit training. And, in lieu of sending Army personnel to Navy facilities in California or Florida, the Army can take advantage of the Jarvis-Smith device at noticeably less cost. The simplicity of the Dunker enables units to train aviators year round, even at a home station's swimming pool. For more information on this intriguing device, refer to page 38, Army Aviation, October 31, 1988 issue.



### Chapter News: Aviation Center Chapter, Ft. Rucker, AL

General Membership Meeting, August 25, 1988. Guest speaker was retired Navy CPT John W. Thornton, prisoner-of-war, Korean conflict. CPT Thornton, who authored *Believed to Be Alive* in 1980, related stories of courage, humor and commitment that helped him to cope with his confinement. CPT Thornton is reputed to be the first helicopter pilot to be shot down during the Korean War. The naval officer endured two-and-a-half years of Communist captivity.



## 50 Years Ago October 1963

### Six Speed Records Set

A U.S. Army OH-23G, piloted by CPT Bertram G. Leach, shattered two previous helicopter world speed records and established four new ones.

CPT Leach piloted the light observation helicopter over three straight and three closed circuit courses near Edwards AFB, Calif. Certification of the new records is pending with the Federation Aeronautique Internationale. CPT Leach is a veteran Vietnam combat support helicopter pilot. He is now assigned to Ft. Rucker as a Logistical Evaluation Project Officer. For a breakdown of CPT Leach's record-setting flights, see "Army OH-23G Sets 6 World Speed Records," page 12, Army Aviation, October-November 1963.



### Largest Delivery

Thirty-nine helicopters were delivered to the Army on 29 October, the delivery being made at a program noting the change in Bell plant cognizance to the Army. At the same time, Bell



announced the receipt of a \$108,320,407 Army contract for additional Iroquois aircraft.

### In Vietnam

GEN Maxwell D. Taylor, Chairman of the Joint Chiefs of Staff, talks with PFC Andrew J. Downin, crew chief of a 119th Aviation Company Iroquois. GEN Taylor was preparing to takeoff for a tour of the II Corps area in South Vietnam. GEN Taylor, together with Secretary of Defense Robert McNamara, relied on Army airlift for most of their Vietnam tour.





*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, AL, where the portraits of the inductees and the citations recording their achievements are retained for posterity. Each month Army Aviation Magazine highlights a member of the Hall of Fame.*

*Nominations for the 2015 induction into the Hall of Fame are currently being accepted, with a deadline date of June 1, 2014.*

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

## **LIEUTENANT GENERAL WILLIAM H. FORSTER, RETIRED**

**ARMY AVIATION HALL OF FAME 2010 INDUCTION - FORT WORTH, TX**

LTG William H. "Bud" Forster made countless outstanding contributions to Army aviation over his 30 year career.

He applied a hi-tech Ph.D. degree and command leadership experiences in Europe, in two Viet Nam tours (173rd Assault Helicopter Company) and in CONUS (10th Combat Aviation Battalion) to drive aircraft combat and logistics systems innovations across the entire aviation fleet.

Fifteen years after his retirement from the Army, his technical contributions remain a part of every major Army helicopter in service.

Dual-rated, an experimental test pilot, and program manager (PM) for both the Kiowa and Apache programs, he pioneered the integration of high capability electro-optic and radar systems on Army aircraft. He was the first officer selected by the Army for astronaut training and the first Aviation Program Executive Officer.

In 1992, he became the first U.S. military officer elected to the Russian Academy of Natural Science. A rare professional, he was the "Renaissance man" of Army aviation from the 1970's to the 1990's.

His combat, military service and civilian recognitions, medals and awards include two Distinguished Service Medals, two Legions of Merit, two Bronze Stars, the Distinguished Flying Cross, 17 Air Medals, two Meritorious Service Medals, the Army Commendation Medal, the Senior Army Aviator Badge, the Senior Space Operations Badge, the Army Aviation Association of America Order of St. Michael (Gold Award) and the NASA Award for Outstanding Service.

After retiring in 1995, he continued to excel in private industry, receiving the American Helicopter Society (AHS) Special Award for Lifetime Achievement in advancing vertical flight technology.

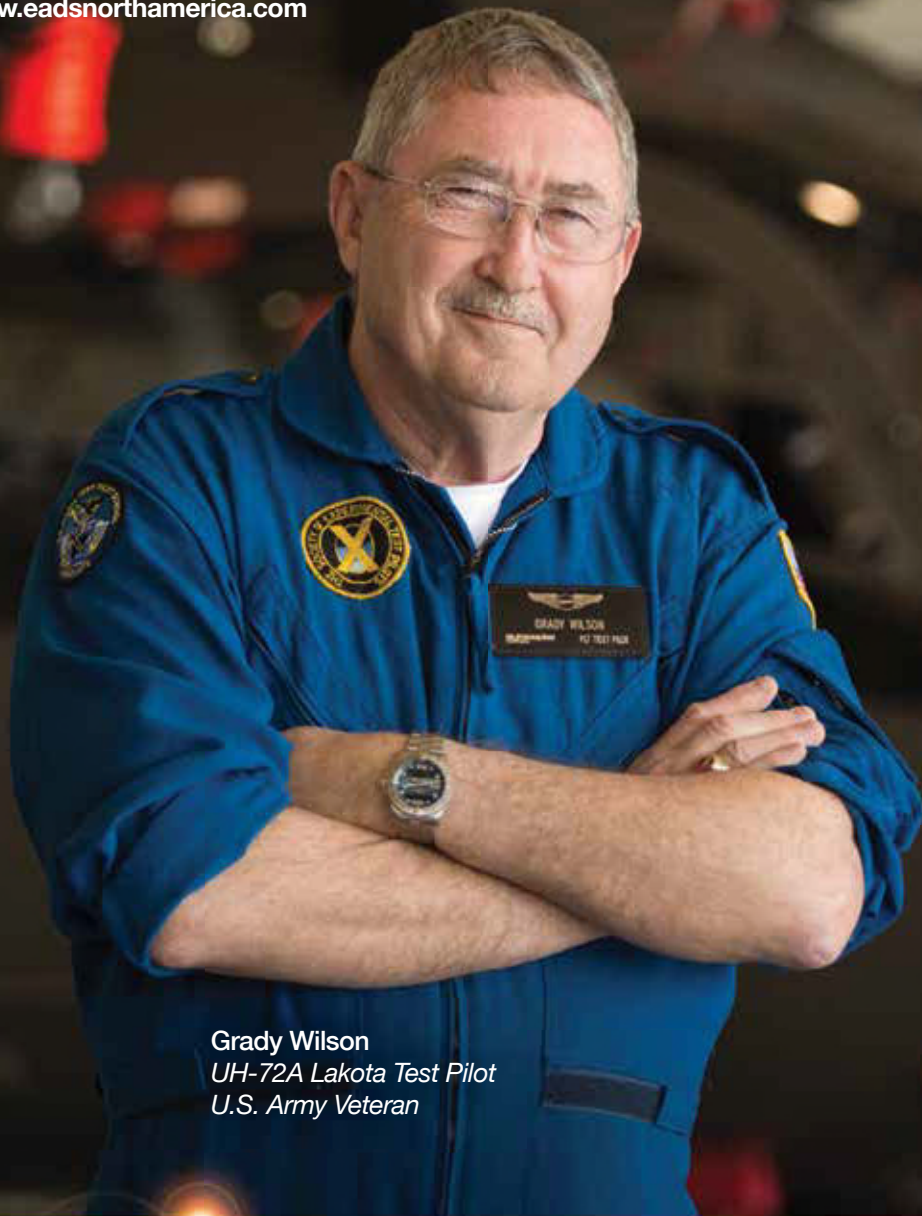
He also chaired the Board on Army Science and Technology and serves on the Army Science Board.



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From serving his country in the skies over Vietnam to testing helicopters for the Army today, Grady brings the same high level of commitment to his job and to our nation. Currently, he serves at our manufacturing facility in Columbus, Mississippi, where more than 50 percent of our employees are veterans. They're proud to have delivered more than 270 UH-72A Lakota helicopters to date – all on time and on budget – and they're ready to bring that same dedication to building the Army's next Armed Aerial Scout. The uniforms may change, but the commitment stays the same.

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Grady Wilson  
*UH-72A Lakota Test Pilot*  
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