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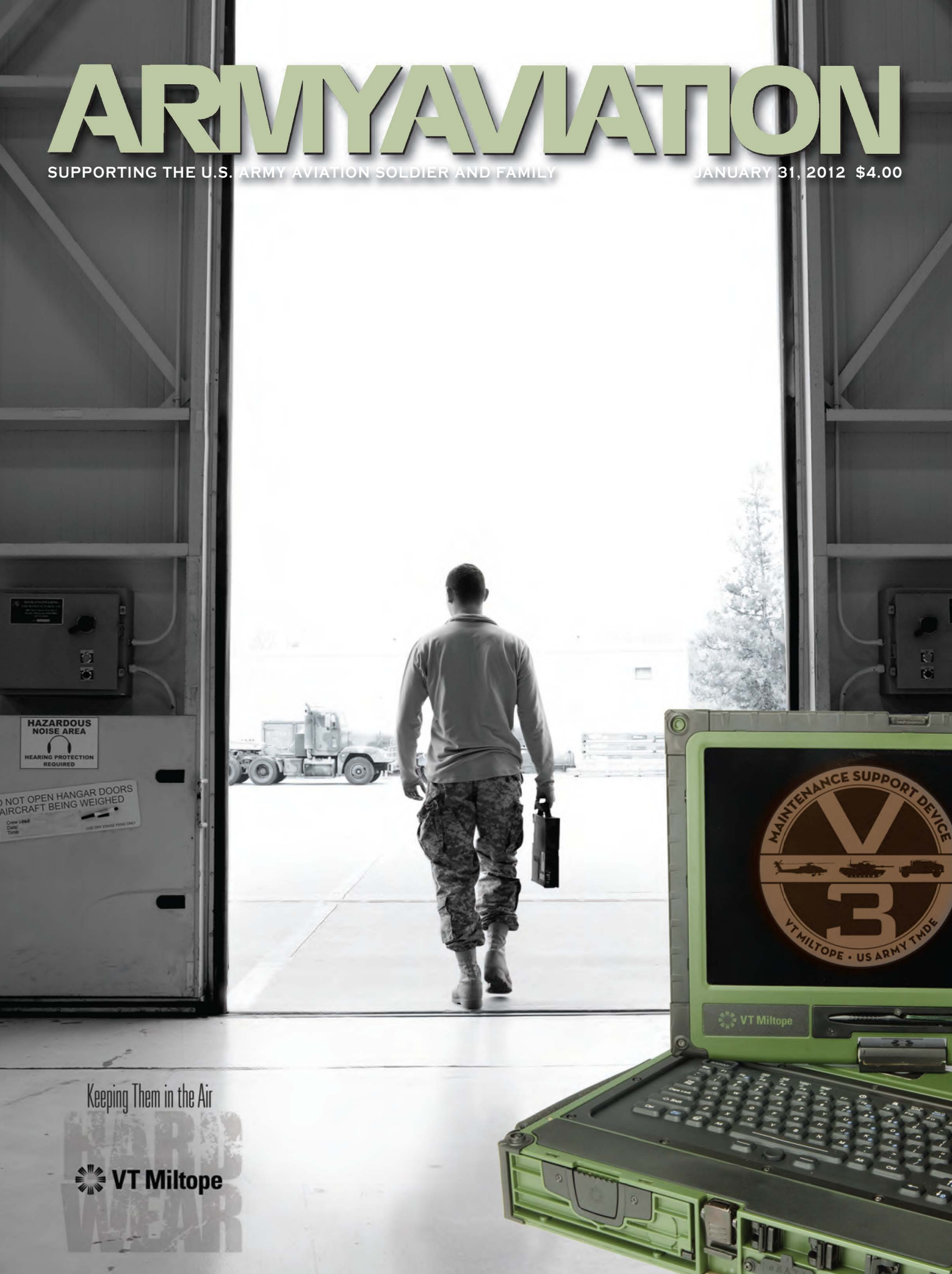

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ARMY AVIATION is the official journal of the Army Aviation Association of America (AAAA). The views expressed in this publication are those of the individual authors, not the Department of Defense or its elements. The content does not necessarily reflect the official U.S. Army position nor the position of the AAAA or the staff of Army Aviation Publications, Inc., (AAPI). Title Reg® in U.S. Patent office. Registration Number 1,533,053. SUBSCRIPTION DATA: ARMY AVIATION (ISSN 0004-248X) is published monthly, except April and September by AAPI, 755 Main Street, Suite 4D, Monroe, CT 06468-2830. Tel: (203) 268-2450, FAX: (203) 268-5870, E-Mail: aaaa@quad-a.org. Army Aviation Magazine E-Mail: magazine@quad-a.org. Website: http://www.quad-a.org. Subscription rates for non-AAAA members: $30, one year; $58, two years; add $10 per year for foreign addresses other than military APOs. Single copy price: $4.00. ADVERTISING: Display and classified advertising rates are listed in SRDS Business Publications, Classification 90. POSTMASTER: Periodicals postage paid at Monroe, CT and other offices. Send address changes to AAPI, 755 Main Street, Suite 4D, Monroe, CT 06468-2830.

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ON THE COVER

Briefings ...

LATE-BREAKING NEWS ANNOUNCEMENTS NOTES

Iraq War Ends

Operation New Dawn–Mission Complete

U.S. FORCES-IRAQ PHOTO BY MSGT. CECILIO RICARDO, US AIR FORCES CENTRAL

GEN Lloyd J. Austin III, commander of U.S. forces in Iraq and CSM Joseph R. Allen, case the USF-I flag during a ceremony marking the end of Operation New Dawn at the former Sather Air Base, in Baghdad, Iraq, Dec. 15, 2011.

Official Welcome Home

DOD PHOTO BY SFC TYRONE C. MARSHALL JR.

President Barack Obama, Vice President Joe Biden, Deputy Defense Secretary Ashton B. Carter, Army GEN Martin E. Dempsey, chairman of the Joint Chiefs of Staff, and Army GEN Lloyd J. Austin III, commander of U.S. Forces Iraq, render honors during a ceremony to commemorate the return of the unit's colors at Joint Base Andrews, MD, on Dec. 20, 2011. The deputy defense secretary acknowledged the thousands of service members who died or were wounded while serving in Iraq. "To the families of the 4,500 troops who made the ultimate sacrifice, to the more than 30,000 troops that bear the wounds of this war and to their families, we lack the words to say what you feel on this day," Carter said. Since 2003, more than 1 million Soldiers, Sailors, Airmen, and Marines have served in Iraq and the President has repeatedly underscored the Nation's commitment to help veterans successfully make the transition home.

Congressional Army Aviation Caucus Inaugural Meeting

COURTESY PHOTO REP. MO BROOKS OFFICE

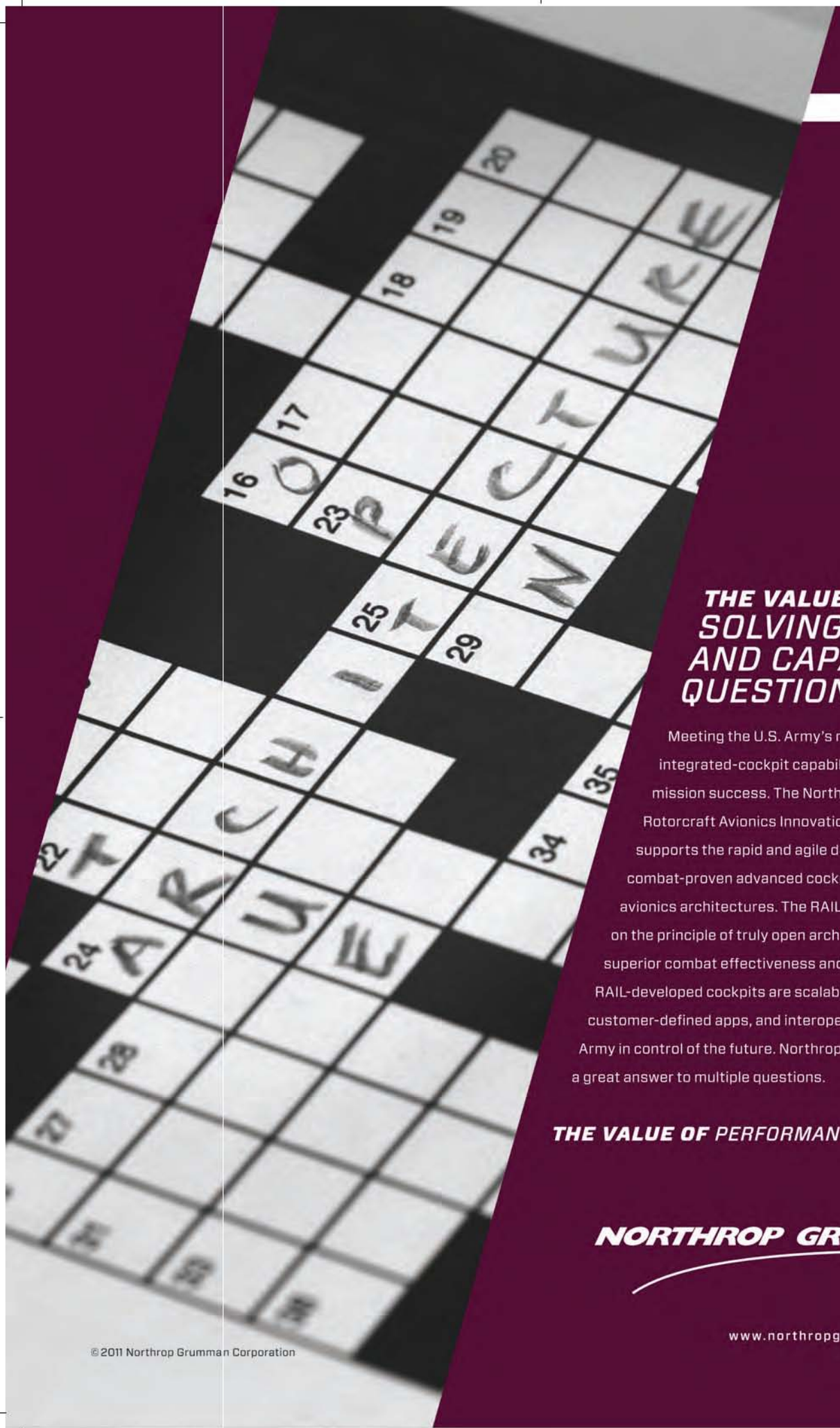
AAAA National President LTG (Ret.) Daniel J. Petrosky is flanked by the co-chairs of the newly established bipartisan Congressional Army Aviation Caucus (AAC), Representative Mark Critz (PA-12)(right) and Representative Mo Brooks (AL-05) during its inaugural meeting on Dec. 13. Brooks and Critz officially announced the creation of the AAC on Dec. 7, 2011 which will provide a forum among members of Congress, staff, and the Army to improve communication and support for Army Aviation. Upcoming work for the Army Aviation Caucus includes Member and staff briefings with key Army Aviation offices to learn about their capabilities and needs. AAAA has pledged its support to the AAC which is comprised of more than 30 members from both parties.

National Guard Marks its 375th Birthday

The origin of the nation's state National Guard organizations sprang from the forming of militia in the Massachusetts Bay Colony in the early 17th century. The Massachusetts colony was founded in 1630 and the military organization we know today as the National Guard came into existence with a direct declaration on Dec. 13, 1636 when the Massachusetts General Court in Salem established that all able-bodied men between the ages of 16 and 60 were required to join the militia. Although America's growth and expansion has made it a large military force around the world, the National Guard remains a community cornerstone – just as it did when it was born over three centuries ago.

CORRECTION:

Nov. Issue, page 50, column 2: first sentence under **Radar** should read "…in the event of inadvertent instrument meteorological conditions (IMC)." We apologize for the omission.



THE VALUE OF SOLVING COST AND CAPABILITY QUESTIONS.

Meeting the U.S. Army's needs for future integrated-cockpit capability is critical to mission success. The Northrop Grumman Rotorcraft Avionics Innovation Lab (RAIL) supports the rapid and agile development of combat-proven advanced cockpits with integrated avionics architectures. The RAIL test bed is built on the principle of truly open architecture to deliver superior combat effectiveness and cost efficiency. RAIL-developed cockpits are scalable, receptive to customer-defined apps, and interoperable — putting the Army in control of the future. Northrop Grumman RAIL: a great answer to multiple questions.

THE VALUE OF *PERFORMANCE.*

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Sixth Generation of Vertical Lift - Are We Already Late ?

The time to begin investing in the sixth generation of vertical lift development is now. We can skip an entire generation of vertical lift development by committing to a sustained period of technology readiness and focus our science and technology efforts to mature the technology that we know we will need to support the future ground force.

By identifying the technologies we expect to need in a sixth generation vertical lift fleet our nation's top scientists, physicists, and aerospace engineers can reduce the technology risk enough to allow future decision makers to make this happen.

The technologies identified must clearly be focused on what Army Aviation feels will most support the future ground forces. This strategy can give us a more mature science and technology/research and development (S&T/R&D) base that can be tested and ready when the time comes to directly field a sixth generation aircraft.

This action will also keep our magnificent work force growing in their technical capability. We need a strong and capable professional vertical lift work force. This is true for aircraft specific items as well as our integration efforts and the development of cyber-physical systems.

Army Aviation is in an excellent position to consider this S&T course of action. We are fielding the UH-60M, the Longbow Block III, and the CH-47 F model. These helicopters have had the insertion of some the government and industry technologies that were developed for what was to be our fifth generation helicopter, the Comanche. It is not a stretch to call the UH-60M, CH-47F, and AH-64 Block III four and half generation machines.

Additionally, the Army is actively pursuing a range of options to cover our manned Scout Requirements. The Army is looking at finding a solution between extending the service life of the current scout or seeking an off the shelf solution that improves on our current capability.

> *"Now is the time to identify and invest in those leap-ahead technologies that will enable future Army Aviation to provide unprecedented support to the ground forces."*

We can keep these existing aircraft mission-effective by utilizing our Life Cycle management strategy and continuing our current fleet sustainment efforts, such as RESET. Additional efforts such as utilizing the Airframe Inspection and Maintenance (AIM) program for the training fleet, that has not deployed, can keep our aviation force strong and leading the world in vertical lift until the time we need a new start to replace them.

Sustaining the current force while committing to leap-ahead capability has the potential to ensure our Army has the future performance, autonomy, survivability, and the dramatically reduced sustainment burden that our troopers deserve.

This decision can provide us integrated future vertical lift aircraft with game changing growth. To do all of this will require a strong career path for our future engineers, scientists and technicians. This type of commitment is needed to keep the United States a vertical lift leader.

It was the bold decisions of those who believed in the science to mature the turbo shaft engine that made the Vietnam helicopter fleet so dependable and capable as we left the first and second generations of piston powered aircraft. It was the bold decisions of those leaders in the 1970s that brought us the Big Five that included the Apache and Black Hawk of the fourth generation that set the conditions for our Army warriors since the mid-Eighties.

I was fortunate to benefit from both of those decisions during my combat time flying the Cobra in Vietnam and again flying the Apache in Desert Storm and having the Black Hawk, Abrams tank and Bradley fighting vehicle in my Brigade Task Force. It is now time for another vertical lift bold Science and Technology decision to be made.

We are a Nation that provides our soldiers, sailors, airmen, marines, and coast guardsmen the best equipment, training, and support in the world. It is now your generation's turn to begin setting the conditions for our future warriors. The majority of this future force and scientists may not even be part of the Army today. We owe them our best efforts to set the conditions for their success.

Now is the time to identify and invest in those leap-ahead technologies that will enable future Army Aviation to provide unprecedented support to the ground forces. Science takes time. We now have the time. But, we have the time only if we commit now and begin a serious program of sustained investment.

We owe it to our future Soldiers and Families.

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LTG Dan Petrosky, Ret.
AAAA President

Aviation Support

By MG Anthony G. Crutchfield

Welcome to another exciting year for Army Aviation! I think we all agree that the men and women of the Army's phenomenal Aviation Team have excelled in all aspects of supporting the needs of our great nation during this time of conflict.

I think it is fitting that I open this year's Army Aviation Association of America (AAAA) *ARMY AVIATION* magazine by highlighting Aviation Support. As a wise old Soldier once told me, "the difference between a click and a bang is support!" Our ability to "move, shoot, and communicate" rests upon a strong foundation of Aviation Support capabilities.

Our requirements team at Fort Rucker works closely with the program managers in Huntsville to get the right Aviation support equipment to our Aviation Soldiers at home and abroad. All too often, we take for granted the Aviation support structure that is in place to keep us in the fight and sustain us as the effective combat multiplier our ground forces rely on.

Oftentimes we jump into our aircraft and without giving a second thought to the vital support work behind the scenes that make that flight possible. Our Aviation leaders work to synchronize Aviation Ground Support Equipment, Aviation Mission Equipment, and Aviation Mission Planning so we can all effectively do our jobs on a daily basis.

This article highlights just a few of the Aviation Support areas we are currently addressing.

US ARMY PHOTO BY SSG MIKE ALBERTS, 25TH CBT. AVN. BDE., PUBLIC AFFAIRS

SPC Douglas J. Kauffeld (pictured exterior to aircraft), AH-64D Apache Longbow crew chief, Company C, 2nd Bn. (ARB), 159th Avn. Regt., TF Wings, 25th Inf. Div., conducts a portion of his pre-flight inspection while communicating with the pilots prior to a mission at Contingency Operating Location Sykes, near Tal Afar, Iraq, Feb 27.

Aviation Ground Support Equipment

Over the last couple of years, we have made great strides in improving our Aviation Ground Support Equipment (AGSE). Prior to 9/11, funding support for such equipment was minimal at best. We accomplished the mission we were given but not without a lot of extra effort and work around solutions. I firmly believe that our current AGSE posture is much better due to the hard work of many unsung heroes across the entire Aviation Enterprise.

We are starting to see the fruits of our hard labor finding their way into our units. In 2009 we began fielding the Standard Aviation Towing System (SATS) and project all systems fielded by December 2012. This is helping our Soldiers to accomplish the mission without a lot of extra work. Complementing SATS will be our new Aviation Light Utility Mobile Maintenance Cart (ALUMMC) which recently received approval from the Department of the Army.

Currently, we have 46 light utility cart variants used by our Aviation Soldiers that have no sustainment support. We know we cannot continue to support this type of effort in the future. This new flight line cart will provide a standardized and sustainable maintenance capability for our aviation formations and will greatly reduce the burden to our combat units who are struggling to maintain their current, commercial off the shelf carts purchased over the years.

Following closely on the heels of ALUMMC is our Next Generation Aviation Ground Power Unit (NxGen AGPU) which will replace our aging fleet of AGPUs as early as 4th quarter, FY 13. This will be a modular, commercial off the shelf unit that will pro-

vide much needed improvements over the current AGPU.

I have talked with Soldiers in the field and I know much remains to be accomplished. I'm continuing to challenge the Aviation Enterprise members to keep up their hard work by focusing on improving the AGSE items we need to sustain our current capabilities.

Aviation Mission Equipment

I am sure most would agree that one area of Aviation Support that has realized significant improvement over the past several years involves individual Aviator support equipment and capabilities. In terms of crew equipment, our current Air Warrior (AW) system is supporting our aircrews but combat operations in the harsh environments of Iraq and Afghanistan have identified some shortfalls.

As part of our efforts to enhance AW and to address identified capability gaps, we are working to field the Air Soldier System (Air SS) which is scheduled to begin fielding in 2015.

The Air SS will allow combat flight missions of at least 11 hours in normal mission profile by providing a reduction in overall weight, bulk, and better compatibility with all platforms. It will provide improved safety and Soldier survivability, increased situational awareness, and reduced pilot/crew member workload through improved technology capabilities.

Feedback garnered from multiple combat rotations over the past several years revalidates our need for a second personal weapon for Aviation crewmembers.

While the Deputy Chief of Staff, G-3 authorization in 2003 to assign two M4 Carbines per combat rotary wing airframe is a step in the right direction we need to follow up with some adjustments.

The U.S. Army Aviation Center of Excellence (USAACE) has requested a revision to the Basis of Issue Plan (BOIP) and change to regulation AR 72-31, Force Development and Documentation-Consolidated Policies, that will authorize deployed rotary-wing aviators and crewmembers be assigned the M4 carbine rifle as a second weapon.

To ensure confidence with their equipment, this proposed change will allocate the resources necessary to zero and qualify with their personally assigned weapon.

Aviation Mission Planning

Getting the right information to the right person at the right time to make the right decision is a goal all Aviation units have wrestled with for many years. Modern automation tools have enabled us to rapidly share what we know.

There are some aspects of commercial technology we can exploit and that is why we are working hard with the Material Developer to field improvements for our Aviation Mission Planning Station (AMPS). AMPS has seen major enhancements and more improvements are on the horizon.

In FY 13 the product manager for Aviation Networks & Mission Planning projects a new update for AMPS that should improve performance, enable better mission planning for multiple platforms, and allow information sharing by planners across multiple vehicles.

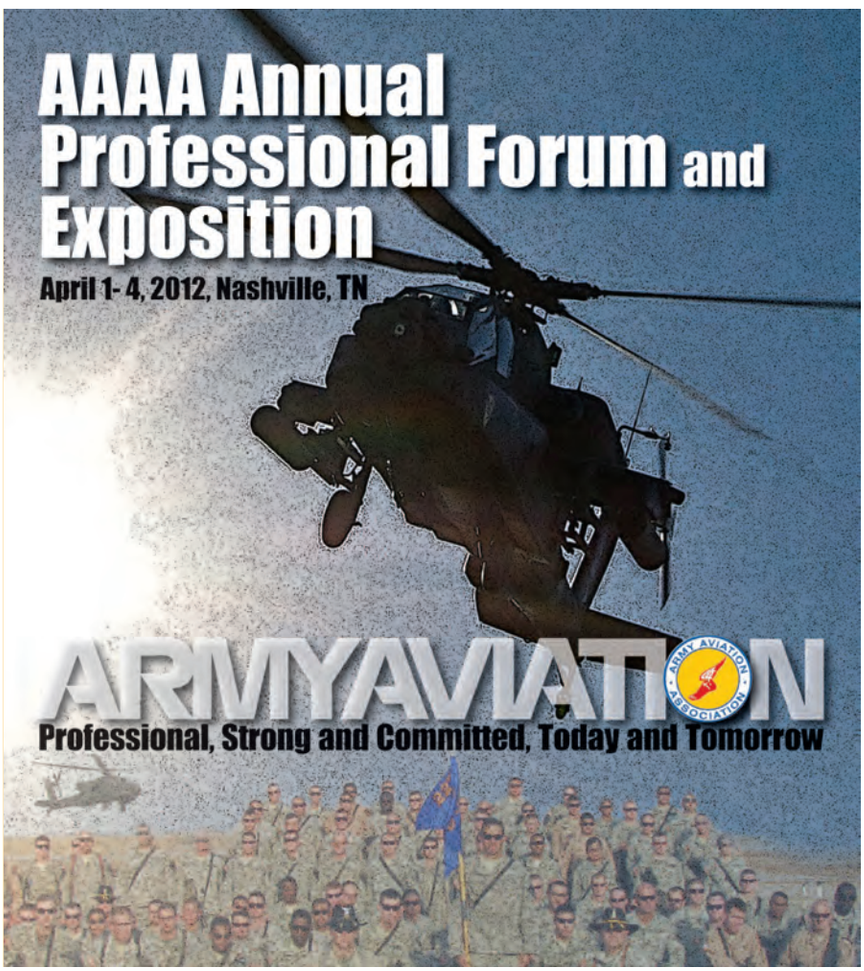
AMPS networking is still a challenge but we are investigating and working multiple initiatives to improve access.

Thanks for All You Do

Our Aviation formations have performed brilliantly in combat and in the most inhospitable conditions imaginable. Aviation support capabilities played a key role in this success and we sincerely thank you for your outstanding efforts.

Through a lot of hard work and tough choices, we have been able to improve the quality of Aviation support throughout Army Aviation.

In order to continue this record of success, we will continue to work together to capture our requirements, identify capability gaps, and articulate to our leadership potential Aviation Support solutions to ensure we remain "Above the Best!"



MG Anthony G. Crutchfield is the Army Aviation branch chief and the commanding general of the U.S. Army Aviation Center of Excellence and Fort Rucker, AL.

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CW5 Reese

Overcoming Aviation Maintenance Challenges at Forward Operating Bases

By CW4 Frank A. Turinsky III

U.S. ARMY PHOTO BY CW4 FRANK TURINSKY, 4-227TH AVN REGT

Panoramic view of TF 4-227th's phase maintenance area. By kitting component consumable packages and performing required maintenance at component work stations, down time is significantly reduced.

The theme in this month's issue is aviation support and there is no better author than a deployed maintenance officer discussing challenges and remedies to project combat power.

Solid maintenance programs are difficult enough to sustain in garrison and when complicated by an austere environment and split in multiple Task Forces (TF) the challenges are daunting. Overcoming these challenges requires ingenuity, resourcefulness, and a tremendous work ethic from our Soldiers who maintain the fleet.

Battalion aviation maintenance officers must broaden their knowledge base for an understanding on multiple platforms and empowerment by the commander to exercise those skill sets makes a difference in operational success.

Above the Best! *CW5 Reese*

Task Force (TF) 4-227th Attack Reconnaissance Battalion (ARB) "*GUNS,*" 1st Air Cavalry Brigade (ACB), 1st Cavalry Division is currently forward deployed in support of Operation Enduring Freedom (OEF) conducting split-based operations out of Forward Operating Base (FOB) Kunduz supporting Regional Command (RC)-North and out of Kandahar Airfield (KAF) supporting RC-South.

The TF is task organized with AH, CH, and UH aircraft operating from FOB Kunduz, providing eight AH-64D Apaches, eight UH-60A/L Blackhawks, and two CH-47F Chinook helicopters to U.S. and coalition forces operating in Northern Afghanistan.

U.S. ARMY PHOTO BY CW4 FRANK TURINSKY, 4-227TH AVN REGT

SPC Audrey Meekins of Co. D, TF 4-227th ARB wires an AH-64D Main Transmission prior to installation.

The other two organic attack helicopter companies are detached from the TF, one operating semi-autonomously at KAF under the tactical control (TACON) of the 159th Combat Aviation Brigade (CAB), and the other attached to TF 3-227th Assault Helicopter Battalion (AHB) "*SPEARHEAD*", 1st ACB, operating in RC-West.

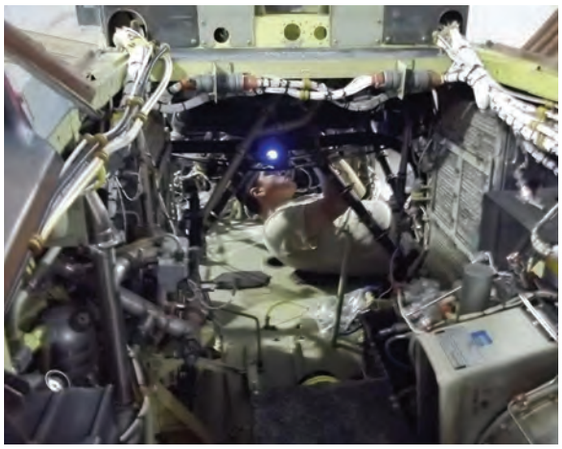
This complicated, multi-function aviation task organization, combined with the split-based operations, not only provides a wide array of responsive and reliable aviation support and direct action to customers, but a unique maintenance challenge as well.

Aviation maintenance is both an art and a science that is difficult to master. Various publications provide the foundation for efficiently managing assets, reporting equipment readiness, and declaring airworthiness. However, resourceful planning bonds these elements in the task force configuration.

The art of aviation maintenance is mastered once a maintenance manager learns to orchestrate and focus all resources towards achieving the commander's intent.

However, garrison management lies in sharp contrast to management in austere remote locations, combined with challenging conditions and a difficult operational environment where success is graded down to each airframe, each crew, each mission; you either can support the ground commander's intent or you cannot.

The sum of effective management and resourcefulness is combat readiness.



U.S. ARMY PHOTO BY CW4 FRANK TURINSKY, 4-227TH AVN REGT

PFC Bryan Gomez, Co. D, TF 4-227th ARB performs phase maintenance in the main transmission deck area of an AH-64D Apache.

Maintenance Hub Concept

1st ACB's aviation support battalion (ASB), 615th ASB "*COLD STEEL,*" is located eighty-seven miles west of Kunduz at Mazar-E-Sharrif, the aviation maintenance hub for RC-N. To further complicate maintenance matters, TF 4-227th MEDEVAC assets operate from further outlying FOBs, essentially making Kunduz the makeshift maintenance hub for all TF 4-227th assets.

When major unscheduled or scheduled maintenance is required that is beyond the scope of an outlying FOB's resources, TF UH-60A/Ls are flown to Kunduz where these issues are rectified by on-site maintainers.

In cases of aircraft that are non-mission capable (NMC), maintenance contact teams are assembled at Kunduz and sent to outlying FOBs until the aircraft is fully-mission capable (FMC). Each location has an organic Maintenance Test Pilot to support all maintenance actions.

Low-Density Military Occupational Specialties

Due to the nature of the TF configuration, no one TF is perfectly outfitted with the Military Occupational Specialty (MOS) density to operate solely off Maintenance Allocation Charts (MAC). For instance, TF 4-227th operates with MOS densities as low as 37% of MTOE in the component repair and maintenance platoons while the 15Y10 Armament Technician MOS weighs in at 52% of MTOE.

Four dedicated 15U maintainers are on hand to perform maintenance on as many as three CH-47F Chinooks, while four dedicated 15T maintainers perform maintenance on eight UH-60 Blackhawks. One 15N maintainer provides avionics support to all eleven airframes. In this environment, mission success depends on MOS cross-training.

Once the MTOE is divided into a tailored TF configuration, manpower management becomes one of the most vital skills a production control officer can perfect. Regardless of MOS, all TF 4-227th maintainers have become proficient in trouble-shooting and performing maintenance on all TF mission design series (MDS). 15U maintainers help perform AH-64D phases, while 15Y maintainers trouble-shoot SATCOM issues on CH-47F aircraft.

Lastly, every TF technical inspector (TI) has received cross-training and is authorized to perform TI duties on each MDS. This open-minded approach develops a more aviation-seasoned soldier and an environment that encourages continuous aviation maintenance education.

Component/Parts Challenges

1st ACB integrated the TF concept into its battalions eight months prior to deployment to OEF. Initial airframe dissemination was not the final mission set, and not every TF is identical in terms of assets, but each is uniquely tailored to its RC mission requirements.

The TF ordered special tools and parts/components specific to each MDS in its new inventory early, trained as a cohesive team, and deployed as such. Early transition to the TF configuration paid significant dividends when each unit reached its respective FOB. Time change/retirement change components are closely tracked and ordered at least 150 hours from scheduled replacement time.

TF 4-227th maintains a component liaison nested with support operations (SPO), who tracks all aircraft on ground (AOG) and high priority parts requests and gets them moving from the hub at Mazar-e Sharif to the TF at FOB Kunduz. The TF liaison is well-versed in all available transportation modes and ensures the required parts reach the point of shipment.

Prescribed load list (PLL) and bench stock replenishment arrives via ground convoy at approximately three week intervals. When inclement weather precludes tactical or contract air from delivering AOG or high priority parts, fixed wing options exist. However, delivery to unsecured airfields requires significant efforts to receive and recover shipments onto the FOB.

Phase Maintenance

In order to maintain healthy bank times and mission readiness, the TF not only relies on 615th ASB for phase maintenance, but performs internal phases as well. TF 4-227th maintainers have averaged AH-64D door-to-door phase time intervals of seventeen days through efficient planning and hard work.

In addition to the stringent component forecasting and MOS cross-training described above, maintenance leaders have integrated the following techniques of efficiency: Each phase inspection plan is briefed to the 1st ACB Commander seven days out from the scheduled induction date.

Phase crews build phase inspection kits that ease the flow of maintenance from induction through maintenance test flight (MTF), to include pre-wiring main transmissions and preparing gearbox seal kits. Pre- and post-phase 100% inspections and MTFs are conducted and all deficiencies noted.

The phase area incorporates a work bench that is divided into lean production work stations for each component removed for inspection. Every panel, component, and part is marked with tags, cleaned, and inspected by quality control at its respective work station.

Phase crew leaders hold bi-daily shift progress meetings, assign tasks to maintainers, and directly supervise.

The component repair platoon section designed and built a unique main rotor pitch change (PC) link jig that allows exact measurement of the removed PC link and adjustment of the new PC link to minimize track and balance time.

Additionally, component repair platoon maintainers received all applicable non-destructive inspection (NDI) certifications possible during the ARFORGEN cycle while at Fort Hood, TX.

Night Vision Device (NVD) MTFs and Maintenance Test Pilot Evaluators (ME)

During the ARFORGEN cycle, TF 4-227th sought and received authorization from U.S. Army Aviation Center of Excellence Directorate of

Evaluation and Standardization for the assigned DES designated ME to train and qualify an additional AH-64D ME prior to deployment.

The newly qualified ME currently serves in RC-W and maintains MTF standardization for TF 3-227th AHB. Early identification and qualification of ME candidates creates the MTF standardization a commander demands and ensures MTP skills do not diminish through the deployment.

Around-the-clock maintenance operations demands efficient management of maintenance test pilot (MTP) work schedules. Prior to deployment, every TF AH-64D MTP was trained and qualified to perform MTFs under NVS by the TF ME.

Flight schedules are produced that identify the duty MTP and MTF co-pilot for every shift, with the duty MTP assuming downed aircraft recovery team (DART) leader responsibilities. Without this NVS MTF capability, fourteen hour voids of productivity would result daily during the winter months in Afghanistan. By training and qualifying all TF MTPs to perform MTFs at night, production is not forced to await official sunrise.

Free Advice, One Maintainer to Another

The fight in Afghanistan demands TF configuration; transition to TF configuration as early as possible prior to deployment. The lead time gained affords a certain amount of trial-and-error in all aspects of aviation maintenance and strengthens each unit.

By assessing and assigning an initial TF configuration, each TF gains familiarity with an MDS they have no previous experience in maintaining. Logistically, identifying and ordering special tools and parts/components for newly gained MDS gives each TF a head start when entering theater.

Combine special tool notes between battalions, order early, and send all required equipment to TMDE prior to deployment so you arrive in theater mission ready.

Grow relationships among TF maintenance managers early. Relationships form and camaraderie grows among maintenance managers by sharing ideas, insights, and familiarity with one another's community. The time to gain familiarity with airframes in your inventory and soldiers in your ranks should not be the first mission following transfer of authority (TOA).

Gain resourcefulness by listening to your soldiers and trying new concepts that do not violate any maintenance publications. Your soldiers have great ideas, desire unit success, and may have the answer to the current problem.

Consider your standardization posture in terms of MEs and consider night MTFs. Set aside the time to train and qualify MEs and MTPs to perform these maneuvers.

Risk mitigation applied properly while allowing these qualifications will increase production safely and produce mission success.

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CW5 Michael L. Reese is the chief warrant officer of the Aviation Branch with the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.

CW4 Frank Turinsky is an AH-64D DES designated maintenance test pilot evaluator, instructor pilot, and government flight representative. He serves as the battalion aviation materiel officer for TF 4-227th ARB "GUNS," 1st ACB, 1st CD, in Kunduz, Afghanistan.

CSM Glidewell

"Sergeant Major of the Army Zero"

By SSG Jose A. Martinez

As we continue to write papers each cycle, we continue finding out more about our aviation history and the tactics, techniques, and procedures that aid in the conduct of our mission. We have gotten some great articles recently, to include biographical sketches on CPL Eddie Ward, the first Aviation NCO and CSM Carl Griffin, the first Ft. Rucker CSM. SSG Martinez does an excellent job of portraying the life and experiences of an individual affectionately known as Sergeant Major of the Army Zero and how his career finished with Army Aviation. CSM Glidewell

How do you define military service? It means different things to different people. Some people join the military because they want to serve their country; others find honor in just wearing the uniform. Still others join as a means to an end, whether it is college or a job.

During these difficult times, with two wars waging and major conflict around the globe, the whole world has seen the importance of the United States military. It has been said that non-commissioned officers are the backbone of the Army. I would like to bring attention to one of the greatest NCOs that ever served the U.S. Army.

I could not have anticipated the rewards of writing about and getting to know the life and service of CSM Carl W. Griffin. He is without a doubt a valuable example of selfless dedication to our country and to its Soldiers.

Very few men who have worn the uniform before those of us who are currently serving have presented as clear a visual display of courage for us to see and understand. Only a select few who have served in peace, war and conflict as has CSM Griffin will be remembered throughout history for their significant accomplishments both on and off the battlefield.

U.S. ARMY FILE PHOTO

CSM Griffin

The Model for SMA

It is CSM Griffin who sculpted the mold, who created the job description, for the position of Sergeant Major of the Army. He is revered and spoken about in the Pentagon as "Sergeant Major of the Army Zero."

CSM Griffin stressed that responsibility takes a prominent place within the NCO Corps. He emphasized the NCOs' responsibilities as leaders in our commitment and dedication, not only to our country, but also to our Soldiers. The NCO Corps has to adapt and ensure our Army is at its best given the current requirements, equipment, and personnel we have.

CSM Griffin is the epitome of what the Army Values encompass. He has served our country with honor and is truly an example for NCOs of today and tomorrow to emulate.

In the Beginning

CSM Carl W. Griffin, a native of Columbus, Georgia, enlisted in military service in 1941, serving first as a gunner instructor in what was then the Army Air Corps with the 386th Single Engine Training Group at Eglin Field, Florida. He volunteered for Airborne training at Fort Benning, Georgia and after graduating joined the 501st Parachute Infantry Regiment of the 101st Airborne Division.

He served in the European Theater during World War II at Ardennes and the Battle of the Bulge from the winter of 1944 through its ending in 1945. Following the war, this Master Parachutist was assigned to the 82nd Airborne Division at Fort Bragg, North Carolina and later moved to Japan in 1948 to the 11th Abn. Div. and also served as an administrative NCO with Eighth Army Headquarters. With hostilities in Korea, he was deployed to and served in the Korean Conflict as a platoon sergeant with the 187th Airborne Regimental Combat Team.

After the Korean War, CSM Griffin was assigned to the 11th Abn. Div. at Fort Campbell, Kentucky from 1952 to 1954, serving as an engineer platoon sergeant, first sergeant, operations NCO, and finally, battalion sergeant major of the 511th Airborne Infantry Regiment.

He was also selected to serve as the special assistant to the commanding general and performed temporary recruiter duties as an Airborne recruiter in the Miami area.

From Ft. Campbell, CSM Griffin deployed with the 11th Abn. Div. to Germany as part of "Operation Gyroscope" which rotated the 11th Abn. with the 5th Inf. Div. in Europe, a monumental task involving a complete transfer of men and equipment.

The Sky Cavalry

In 1956, he served with the 11th Abn. and 24th Inf. Divs. as an operations sergeant, then first sergeant of C

Troop, 17th Cavalry, the first "sky cavalry" unit, where helicopters replaced ground scout vehicles.

While serving with the 17th Cav., he participated in operations in Lebanon in 1958.

While in Lebanon, he was selected to be one of the Army's first NCOs to earn the rank of master sergeant.

In late 1958, after the Lebanon crisis, he returned to the U.S. and was assigned to Fort Bragg as Sergeant Major of the 325th Inf., 1st Airborne Battle Group, 82nd Abn. Div. and later was selected to serve as the division sergeant major for the 82nd.

Creating the Mold

He next moved to the Pentagon in Washington, D.C., serving as the senior NCO for the Army Staff and sergeant major for the Office of the Deputy Chief of Staff, Personnel, from 1963-1965. In this capacity, he was also the enlisted representative to the Department of the Army staff worldwide in matters affecting enlisted men, such as pay and housing, which is equal to the position we know today as Sergeant Major of the Army, hence Sergeant Major of the Army Zero.

He was one of the first selected to receive the new rank of command sergeant major and was assigned to Fort Rucker, Alabama, to serve as the post command sergeant major.

In 1967, he deployed to Korea where he served as the Eighth Army and U.S. Forces Korea command sergeant major. Following his tour in Korea, he returned to Fort Rucker and resumed his duties as post command sergeant major where he served until retirement in 1969 with 28 years of dedicated service.

His awards and decorations include the Legion of Merit, the Bronze Star, the Purple Heart, the Combat Infantryman's Badge with Star, the Master Parachutist's Badge, the Army of Occupation Medal, the World War II Victory Medal, the European – African – Middle Eastern Campaign medal, the Korean Service Medal, and the Army Commendation Medal with Oak Leaf Clusters.

In Summary

I believe that CSM Griffin has truly earned a place in Army Aviation history. He exemplifies a class of Soldier that only comes along once in a lifetime.

CSM Griffin served in two great wars, World War II and the Korean War and was a pioneer in many respects: he was one of the first Soldiers to achieve the rank of E-8 and command sergeant major; and he created the mold for the position of Sergeant Major of the Army. He honorably served his country for twenty eight years. Presently in his late eighties, I strongly believe we should recognize CSM Griffin's dedication, and accomplishments now. He has made lasting contributions to Army Aviation, the United States Army, and our Nation.

Above the Best!

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CSM Tod L. Glidewell is the command sergeant major of the Aviation Branch and the U.S. Army Aviation Center of Excellence, Fort Rucker, AL.

SSG Jose A. Martinez was a student at the 15Q40 Senior Leadership Course, U.S. Army Aviation Center of Excellence, Fort Rucker, AL when this article was written.

What's Your Plan for 2012?

By BG William T. Wolf

Planning is one of the things we do most as leaders – we plan for missions, training and any number of other events throughout the year. Recent accident statistics show we're getting better and better at planning for risk as well.

And if you haven't started planning for the hazards your Soldiers might face in the months ahead, the new year is a perfect time to begin.

Accident reports from past Januarys indicate several issues leaders should be focusing on with their Soldiers. Not surprisingly, the most critical area of concern is privately owned vehicle safety.

From 2007 to 2011, an average of nearly five Soldiers died in POV crashes during the first month of the new year. Although that number is somewhat lower than we typically experience during spring and summer, the last months of winter are no time for leaders to lose sight of their high-risk Soldiers.

The combination of inclement weather and risky driving behaviors like speeding, drinking and driving and failure to wear seat belts is deadly any time of year, but especially in winter when black ice and other hazards are common on roadways across the United States and overseas.

Motorcycle Mentorship

Statistics also show that motorcycle fatalities happen year-round.

During the 2007-2011 timeframe, 17 Soldiers were killed in motorcycle accidents occurring in January or February. That number might seem counterintuitive given the general perception that motorcycle riding is a warm-weather activity.

However, all but one of those accidents happened in the Deep South or Southwest – regions that typically experience mild winters and where hundreds of thousands of Soldiers are stationed.

Leaders at installations in more congenial climates must continually engage with their Soldiers on both the joys and hazards of motorcycle riding, especially if they themselves are riders.

Motorcycle mentorship programs are thriving on many of the large installations in these areas, so I encourage leaders who aren't involved in an MMP to join one nearby or establish an original charter for their unit.

Unfamiliarity Can Be a Threat

Leaders also can't forget about new "toys" their Soldiers might have received as holiday gifts.

Many well-intentioned spouses and parents excitedly purchase big-ticket items like firearms and all-terrain vehicles for their Soldiers, forgetting that a lack of training and experience can result in devastating accidents.

Approximately one Soldier died in negligent discharge incidents immediately following the holidays every year during the past five years, and alcohol use was confirmed in at least three of those accidents.

Leaders should ensure Soldiers receiving gifts like weapons, ATVs or dirt bikes complete proper training and gain experience in controlled instructional environments through classes offered on post or by a reputable training organization off the installation.

Resources

The USACR/Safety Center stands ready to help leaders in any way possible. We're midway through the annual Safe Fall/Winter Campaign, which contains numerous multimedia tools ideal for safety boards, unit publications and safety briefs.

The POV/POM Toolbox, located along with the MMP site on the POV Safety home page at *https://safety.army.mil*, is an invaluable resource for leaders looking to engage with and educate their Soldiers on vehicle and motorcycle safety.

U.S. ARMY PHOTO BY SSG JESSIKA MALOTT

1LT Jessie Sheehan, infantry platoon leader from Knoxville, TN, assigned to Co. D, 1st Bn., 505th Parachute Inf. Regt., attached to the 1st Bde. Cbt. Tm., 4th Inf. Div., Multi-National Division-Baghdad.

The Firearms Safety Techniques Challenge, an interactive tool that simulates weapons handling in a variety of scenarios, is another great resource available on our website.

While none of these products takes the place of hands-on training or engagement, they do provide a fantastic start to effective safety programs.

Our Army just finished another positive year for safety, but we cannot afford to rest. Leaders and Soldiers staying engaged are the primary reason for these positive results, and I ask for your continued engagement.

Thank you all for what you do every day – your hard work shows in the face of every healthy, safe Soldier in your formations.

Keep up the great work, and I look forward to seeing what 2012 brings!

Army Safe is Army Strong!

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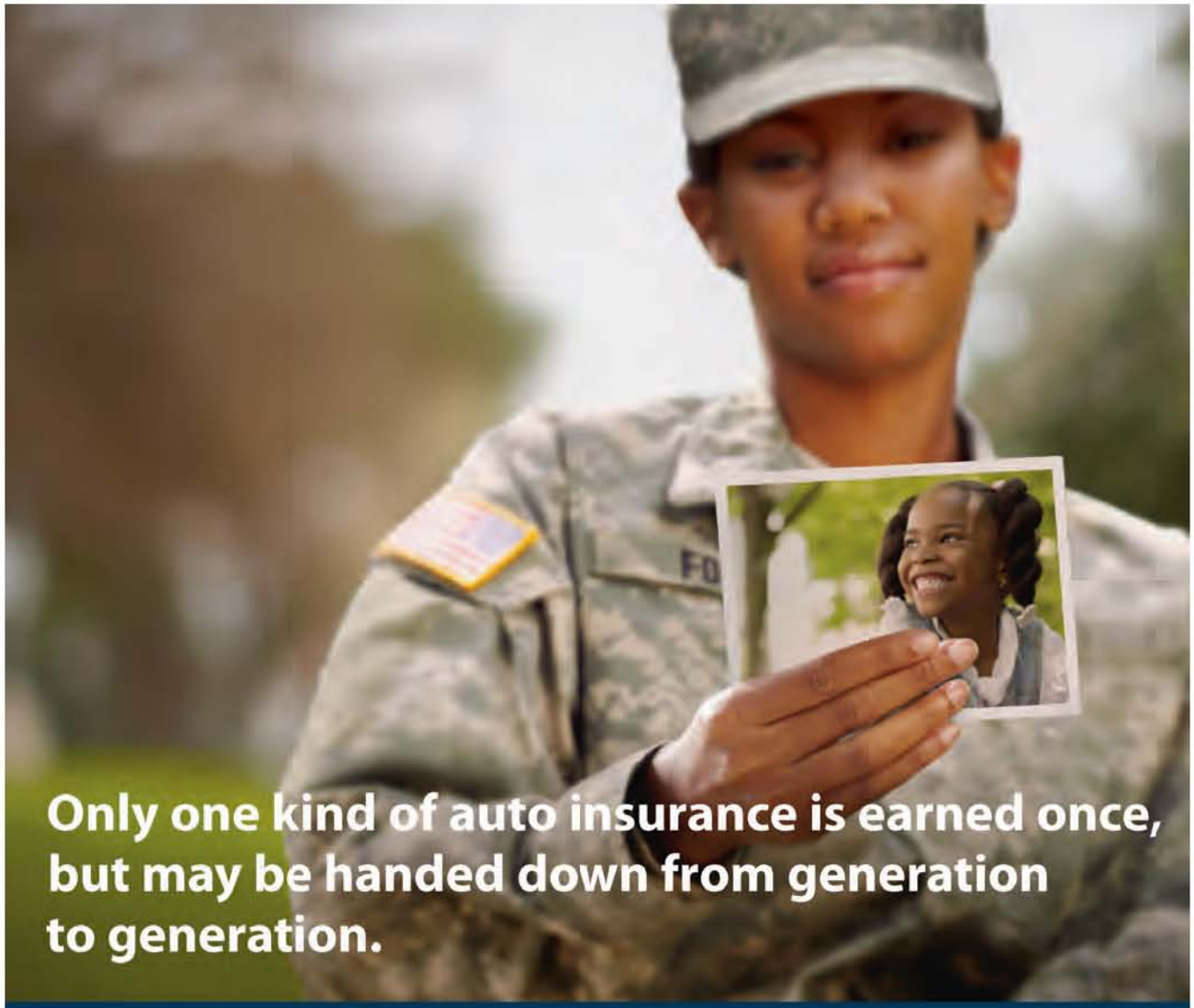
BG William T. Wolf is the director of Army Safety and commanding general of the U.S. Army Combat Readiness / Safety Center at Fort Rucker, AL.



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This month, LTC Vernon Miles discusses the training techniques, processes, and resources we utilize at your school house to develop world-class weapon systems repairers for fighting units in all areas of operations. COL Heitkamp, Commander

Arming the Force

By LTC Vernon H. Miles Jr

The worst nightmare of any attack or armed scout helicopter pilot in combat is to hear the hollow click… click… click… of the trigger as they engage their weapons systems. What they should be hearing is either the hammering of a gun firing or the whoosh of rockets or missiles leaving the tubes.

Weapons system reliability is a function of design and proper maintenance. We have little influence over the design of the weapon system but we can influence the quality of the maintenance.

At the United States Army Aviation Logistics School (USAALS), Department of Attack Helicopter Training (DAHT), our goal is to provide well trained, world class weapon system repairers to the fighting units. To do this we train more than 1,000 Soldiers annually in armament/electrical/avionics systems (15J10/30 and 15Y10/30) repair and SQI-E armament warrant officers for the OH-58D and AH-64 aircraft.

More than any other courses taught here at the school, the sheer volume of tasks required by the "Yankee" and "Juliet" are among the most technically challenging in the branch. These courses incorporate three different but related skill sets of armament/electrical/avionics into some of the longest courses conducted in resident training.

Unlike Soldiers even of the Desert Storm era, the majority of today's initial entry training (IET) Soldiers attending their 10-level training have little or no experience in mechanical electrical repairs. Most have pretty good gaming skills and are very comfortable around keyboard devices, but have they fixed anything?

No way, if it is broke…pitch it… we are a disposable society. You can imagine the problems we would have if Army Aviation adopted that philosophy! So how do we take these "gamers" and keyboard warriors and make them maintainers? By using the very technology they are comfortable with and leverage it to teach them what they must know to support their combat aviation brigades (CAB) the day they arrive at their unit.

U.S. ARMY PHOTO BY CW3 JAMES SANCHEZ

AH-64D armament officer students troubleshooting avionic systems on the L-10 Longbow Cockpit Display System Task Trainer with VIE technology.

DAHT produces the finest armament/electrician maintainers in the world through innovative technology, effective educational techniques, first-rate training devices, and top notch NCO instruction designed specifically to meet the unique training requirements.

Technology

Today most of our students are of Generation Y or the Millennial Generation (18-30 years old). Members in these cohorts were born after the development of the Internet and grew up with social media. They are experienced users of social networks (Facebook, YouTube, Twitter, etc.) and are comfortable with online coursework and touch technology.

Working with the Program Executive Office, Aviation (PEO-AVN) program managers (PM) and various training industry partners, training is rapidly transitioning from a "sage on the stage" instructor/Power Point environment to embracing "SmartBoard" and other touch screen technology.

Examples include the new Graphic Aviation Maintenance Enhancer (G.A.M.E); a sophisticated interactive training scenario that requires Soldiers to complete a maintenance function (i.e. replace an APR-39 antenna on the AH-64) during the mission scenario.

After the Soldier completes assigned tasks by selecting the correct tools for the mechanical issue and effectively communicating with production control/quality control (PC/QC) personnel, he or she performs a tactical mission as well. This use of "gaming"/entertainment coupled with education fits the learning patterns of these Soldiers.

Requirements for the aircraft in the field have left the PMs with the

dilemma of how to provide commanders with these valuable weapons systems yet still provide the training community with the necessary tools for instruction. DAHT's solution is utilization of inactive aircraft.

Our training is conducted and specifically designed to simulate a vast spectrum of maintenance issues. This allows instructors to set conditions to maximize student proficiency.

One of these devices is the L-10 Longbow Cockpit Display System Task Trainer, a virtual immersion environment (VIE) trainer that is used to train Soldiers on electrical, avionics, and Maintenance Operational Checks (MOCs) as well as start-up, shut-down, switchology, and weapons employment.

The major benefit of this device is the 60-inch touch screen that allows Soldiers to work virtually on the aircraft while determining which manuals, tools, and MOCs are required to complete the task.

This develops and reinforces proper procedures in performing maintenance and MOC operations thus resulting in reduced wear and tear on the actual training devices (or aircraft). Some parts are designed to be replaced a limited number of times on actual aircraft, such as the mast mounted sights on an OH-58 which will be replaced hundreds of times a week or month at DAHT depending on student load.

U.S. ARMY PHOTO BY CW3 JAMES SANCHEZ

SSG Anthony Lupica demonstrating the proper procedures for loading and unloading rocket pods on the OH-58D to a 15J class.

Effective Educational Techniques

We are implementing several TRADOC changes as outlined in the new Army Learning Model 2015 which shifts the training focus from an instructor-centric to a learner-centric paradigm and promises to transform the Army's existing learning models and competitive learning environments.

As stated above, with the dramatically reduced instructor-led Microsoft PowerPoint lectures, classroom conference time has been cut and students spend more time in the hangar.

By February 2012, VIE trainers will be placed on the hangar floor next to training devices allowing instructors to show students various systems (visual reference) and reinforce with hands-on training (touch reference). The combination of visual and tactile training aids provides students more time with critical tasks such as removing and installing components and troubleshooting aircraft systems. The combined effect supports a broad understanding of aircraft components and knowledge retention.

The U.S. Army Aviation Center of Excellence (USAACE) is currently revamping the field training exercise for all CMF 15 MOSs moving to a situation-based training exercise allowing students examples of experiences they will encounter in their unit, including production control meetings, quality control factors, and troubleshooting procedures.

For example, in one scenario, students are briefed in a production control meeting. Their objective is to unload two AH-64Ds off a recently landed C-17. The helicopters need to be unloaded as soon as possible and mission ready within 24 hours. This one real world task reinforces a number of critical tasks, readiness skills, and base knowledge that has already been taught in training.

Once the aircraft are prepped and fully mission capable (FMC), the students move into mission operations. For the next two days of training, the students are taught scheduled maintenance, unscheduled maintenance, and troubleshooting skills that can be facilitated by our trainers and instructors.

The key to training effectiveness is input from our instructors and field input through NCO professional military schools. This allows the situational training exercise (STX) to be constantly updated with current trends in the field.

Future Challenges

Within the next year, the Army will start fielding the AH-64 Block III Apache and, not far behind, the OH-58F model will be joining the fleet.

These additional aircraft will require DAHT to continue training current models while developing and implementing the new curriculum that supports these upgraded systems.

We will make this happen while working together with the PMs, TRADOC, and the CABs.

DAHT is a learning organization that conducts consistent assessments through various means with students, instructors, various assessment organizations, aviation brigades, PMs, and other entities striving to improve the quality of our students.

With your help, dedication, and desire for excellence, we will continue to develop the finest armament/electrical maintainers in the world. DAHT's end result is when our aviators are conducting close combat attacks in support of our ground commanders we put lethal munitions accurately on the target.

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LTC Vernon H. Miles is the director of the Department of Attack Helicopter Training, U.S. Army Aviation Logistics School, Joint Base Langley-Eustis, VA.

The Aviation Systems Project Management Office

By COL Anthony W. Potts

The products and systems managed by the Aviation Systems (AS) Project Management (PM) Office touch every aircraft in the Army portfolio. From the communication and navigation equipment to the ground support equipment required for successful maintenance, the PM AS equipment is critical to Army Aviation successfully completing all assigned missions.

Established on October 1, 2001, the PM AS team is responsible for developing and integrating a wide spectrum of world class aviation products and services to meet Soldiers' needs, generate common aircraft solutions and conserve resources. This mission is accomplished thru management and oversight of product offices, all working with the PM AS headquarters team to address the "cradle to grave" management challenges of over 50 separate and distinct products.

This edition of Army Aviation includes updates from three of the four PM AS product offices. The PM for Aviation Mission Equipment, LTC James Bamburg, has provided an update on the Communications, Navigation and Surveillance (CNS) systems his team manages. The Product Director for Aviation Networks and Mission Planning, Mr. Mike Chandler, provides an update on the Aviation Mission Planning System (AMPS) and the Improved Data Modem (IDM) as well as insight into the work being accomplished by the Degraded Visual Environment (DVE) team. Mr. Rod Bellows, the Acting Product Manager for Aviation Ground Support Equipment provides an update on some of their new programs as well as their modernization, repair and reset programs. By the time this edition is in your hands Rod will have turned the reigns over to LTC Steve Ansley, the newest product manager to join the PM AS team. Although LTC Mike Rutkowski, the Product Manager for Air Traffic Control, published an update to their activities in the November edition we've highlighted some of the Tactical Airspace Integration System (TAIS) contributions during the recent Network Integration Evaluation (NIE) in the NIE update.

I hope you enjoy these insights into the work being accomplished everyday by nearly 450 dedicated professionals that make up the PM AS team.

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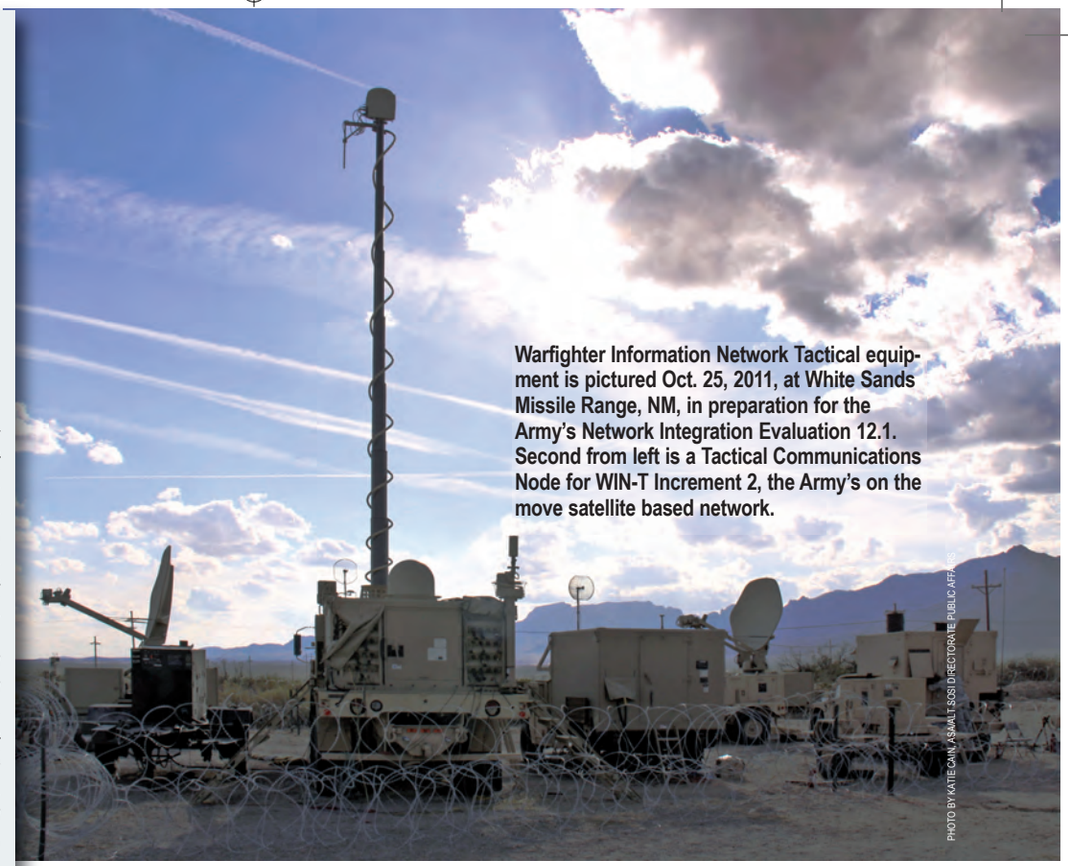
COL Tony Potts is the project manager of the Aviation Systems Project Management Office at Redstone Arsenal, AL.



Warfighter Information Network Tactical equipment is pictured Oct. 25, 2011, at White Sands Missile Range, NM, in preparation for the Army's Network Integration Evaluation 12.1. Second from left is a Tactical Communications Node for WIN-T Increment 2, the Army's on the move satellite based network.

PHOTO BY KATIE CANN, ASAALT SOSI DIRECTORATE PUBLIC AFFAIRS

Army Aviation Tactical Networks Integration

Network Integration Evaluation 12.1 Reaching the Tactical Edge

By COL Anthony W. Potts and Mr. James W. Kelton

The Army's experience with Force XXI and the Future Combat System has led to a clear understanding that the "network" represents the single most synergistic element to shape victory on the future battlefield.

The challenge lies in harnessing an array of technical solutions integrated and synchronized across our doctrine, organization, tactics, material, leadership, personnel and facilities (DOTMLPF) processes.

The Army's approach to addressing this problem has been a series of network integration evaluations (NIE) at Fort Bliss, TX, and White Sands Missile Range (WSMR), NM.

As we integrate Army Aviation into this testbed for future networking capabilities, we must adapt our fleet's legacy radios, improve mission command systems and processes, and develop sound concepts of employment to ensure that Army Aviation can be a consumer, provider and enabler of the new network technologies.

The recurring NIE process is a result of Vice Chief of Staff, Army guidance to synchronize the requirements, development, and test communities to speed the delivery of integrated network capabilities.

A key element of these evaluations is a dedicated heavy brigade combat team (BCT) executing tactical missions against an opposing force.

The construct includes formal program testing by Army Test and Evaluation Command (ATEC) and Training and Doctrine Command (TRADOC) personnel, evaluating government and industry networked and mission command capabilities.

Army Aviation performs three critical roles for future network designs.

As a primary provider of both combat power and support functions on the battlefield, Aviation is a consumer and a provider of voice, data, and video services passing over the network.

Secondly, the vertical dimension of Aviation in the asymmetrical fight has cast us in an emerging role as an extender of network services to the force. Finally, Aviation has a critical role in conducting air-ground integration (AGI) tasks.

The principal challenge for Army Aviation during the NIE is to advance aviation participation in emerging networks beyond the current Single Channel Ground and Airborne Radio System (SINCGARS) combat net radio and Blue Force Tracking (BFT) baselines.

The Aviation Systems project management office utilized a Joint Tactical Radio System (JTRS) program of record Rifleman Radio to help technologically inform potential future network solutions and network operations. The size, reliability, and availability of the JTRS Rifleman Radio (AN/PRC-154) proved to be a highly successful surrogate for Airborne Maritime Fixed – Small Airborne (AMF-SA) which is still under development.

The aerial tier mission was performed by a Shadow unmanned aircraft system (UAS) and a C-12 fixed wing aircraft. The Shadow was already fielded to the NIE maneuver brigade and required only minor modifications to house the Rifleman Radio.

A higher capacity, multi-waveform capability to serve network backbone functions for the company, battalion, and brigade was more problematic since the robust communications package in the Gray Eagle UAS will not be available until later in the decade. A surrogate solution was to use a C-12 fixed wing aircraft to establish the aerial tier platform.

A JTRS Ground Mobile Radio (GMR), Enhanced Position Location Reporting System (EPLRS), Harris High Capacity Network Radio (HNRe2) and three AN/PRC-117G radios were installed to meet the necessary aerial tier requirements above the BCT.

These efforts helped advance the future network designs for aviation integration and increased awareness of the complexities of ground network planning and integration.

Aviation as a Consumer of Network Services

NIE 12.1 presented an opportunity to engage multiple aviation platforms in mission command networks.

The AH-64D Apache was outfitted with a Rifleman Radio integrated with the mission processor to provide voice, position location information (PLI), and limited message set selections. Apache data exchange was primarily threads in support of calls for fire and close combat attack.

An OH-58D Kiowa Warrior demonstrated Rifleman Radio voice, PLI and data exchanges in the form of free text and SPOT reports utilizing an engineering release of the future Improved Data Modem.

Two UH-60L Black Hawks from the 1st ID Combat Aviation Brigade were outfitted with Rifleman Radios to provide a forward edge voice capability between the crew and ground units in the exercise.

Aviation as an Extender of Network Services

All Aviation platforms demonstrated varying degrees of network extension capabilities for the BCT. The most aggressive application of aerial tier extension was the C-12 aircraft.

The C-12 proved to be an adaptable and effective platform to demonstrate future capabilities for extending the Soldier Radio Waveform, Wideband Network Waveform, EPLRS, Advanced Networking Wideband Waveform (ANW2), High-band Networking Waveform (HNW), and SINCGARS.

Post-NIE data analysis is still underway, but it was clear that the C-12, operating at 10,000 feet above ground level over the BCT, extended networks at appreciable distances and with respectable capacity.

On takeoff, the HNRe2 radio immediately established a 6 megabit connection at 50 miles with a battalion tactical operations center (TOC) in the exercise area; capacity increased as the distance closed between the two radios.

The capability to extend high-bandwidth line of sight radio networks serves as an important precursor to the capabilities expected to be provided by the Warfighter Information Network-Tactical (WIN-T) communications payload, currently scheduled for integration onto the Gray Eagle UAS.

The Shadow UAS provided aerial tier network extension for both SINCGARS and Soldier Radio Waveform (SRW) networks. In one scenario, a Shadow provided the aerial tier network extension between SRW equipped rotary wing aircraft and a ground unit 30 miles away.

ASA/ALT SOSI DIRECTORATE COURTESY PHOTO

A Soldier from the 2nd Brigade, 1st Armored Division uses the JTRS Rifleman Radio to communicate to his unit during the Army's second Network Integration Evaluation, NIE 12.1, at White Sands Missile Range, NM.

Another excursion featured Shadow providing a gateway connection from its onboard electrical optical camera to the wing tip SRW radio for distribution of streaming video over SRW to ground forces with Rifleman Radios and Android handheld devices.

The Shadow fills the need for long duration loiter times above the BCT, which is an essential reason UAS is the platform of choice for the network extension mission.

Raven small UAS provided a third level of aerial tier network extension.

In a concept demonstration role, the electro-optical camera was replaced with a small form factor SRW radio to provide an aerial tier network extension at the company level. The objective was to seek feedback on the value of extending edge networks with organic, re-purposed equipment.

PHOTO CREDIT CLAIRE SCHWERIN, PEO C3T

Soldiers from the 2nd Brigade, 1st Armored Division collaborate using Mission Command applications inside a tactical operations center at NIE 12.1.

Air-Ground Integration (AGI) Initiatives

2nd Bn., 1 Air Defense Regt. established an Airspace Integration Center (AIC) to support NIE 12.1 with an attached air traffic control company from the 1st Infantry Division, operating a Tactical Airspace Integration System (TAIS).

The AIC established flight safety for all manned and unmanned aviation systems. This freed the Air Defense Airspace Management/Brigade Aviation Element to focus on airspace command and control tasks.

NIE 12.1 provided the opportunity to validate an initiative to reduce multiple source position reports into correlated, time stamped tracks provided to the brigade air picture.

The Friendly Force Tracker Correlator (FFTC) received three radar feeds from WSMR range control and combined these with BFT-Aviation tracks to provide a de-cluttered, single, integrated air track picture with track identification. The intent is to take this capability forward into future NIE events as part of the Airspace Integration Improvements Initiative (AI3).

The Way Ahead

NIE 12.1 was an important exercise for the Aviation community.

The aerial tier was greatly expanded with C-12, Raven, and Shadow providing capabilities to extend the network for ground units and for helicopters enroute to troops on the ground in an objective area.

Kiowa Warrior, Apache, and Black Hawk platforms each engaged in mission command efforts with varying levels of voice, PLI, and data exchange with TOCs and forward edge units.

These evolving mission command capabilities and improving AGI initiatives made NIE 12.1 a remarkable event for the integration of Aviation into the brigade network.

A range of capabilities have been proposed for NIE 12.2 in the spring of 2012 that includes expanded SRW message sets and an SRW roamers network. The roamers net will facilitate ground-air and ground-ground voice and data communications.

The end result will allow forward edge leaders and soldiers to communicate more effectively with assets not organic to their formations, such as Army Aviation.

NIE 12.2 will also continue to advance AGI through dynamic airspace updates (DAU). This will provide TAIS with the capability to build airspace control measures and transmit them over the BFT network (and later the SRW network) for reception and automatic updating and posting to aircraft in flight.

Through participation in the NIE series of events, Army Aviation is committed to being an active partner and an agent of change in the development of the Army's future networks and networked capabilities.

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COL Tony Potts is the project manager for Aviation Systems, PEO Aviation, Redstone Arsenal, AL and Mr. James W. Kelton is a former Army Aviator and the assistant product manager, Automated Aviation Logistics, and was the Program Executive Office, Aviation Team Lead at NIE 12.1.

The AN/ARC-231 radio set is a multi-mode VHF/UHF LOS and tactical satellite communications system.

Aviation Mission Equipment – Communications, Navigation and Surveillance Planned Upgrades

By LTC James A. Bamburg

All Army aircraft require communications, navigation, and surveillance (CNS) equipment in order to effectively and safely operate in both civil and military airspace.

The product manager for Aviation Mission Equipment (PM AME) is responsible for providing the common CNS equipment that meets the full range of Army Aviation requirements from Federal Aviation Administration (FAA) and International Civil Aviation Organization (ICAO) mandates required to fly in commercial airspace to tactical secure CNS capabilities that enables Army Aviation to be effective in combat operations.

PM AME is also responsible for planning and development to meet future requirements as defined by the Aviation Sustainment Division of the Training and Doctrine Command Program Office – Aviation Brigades (TPO-AB).

Current PM AME products include the AN/ARC-231 and AN/ARC-220 communications systems, the AN/ASN-128D and EGI H-764 navigation systems, and the AN/APX-118 and AN/APX-123 surveillance systems.

Additionally, PM AME has the responsibility for integrating Joint Tactical Radio Systems (JTRS) into all Army Aviation manned and unmanned platforms. Current and planned upgrades to each of the products and JTRS integration activities are discussed in the following paragraphs.

AN/ARC-220 High Frequency (HF) radio.

Communication Systems

The *AN/ARC-231* radio set is a multimode very high frequency/ultra high frequency (VHF/UHF) line-of-sight (LOS) and tactical satellite communications system. After close coordination with each supported platform, and the Aviation Engineering Directorate, PM AME received the Air Worthiness Release for the Demand Assigned Multiple Access (DAMA) Integrated Waveform (IW) software upgrade to the AN/ARC-231 and began fielding in September 2011. This upgrade provides aircraft more reliable user access to critical non-line-of sight (NLOS) Satellite Communications (SATCOM) waveform capability.

Future upgrades include modifications to meet DoD Crypto Modernization program requirements and to incorporate the Mobile User Objective System (MUOS) waveform. This will allow the AN/ARC-231 to maintain cryptographic tactical satellite interoperability with other DoD communication systems and a more secure/reliable communication environment.

The *AN/ARC-220* High Frequency (HF) radio and its AN/VRC-100 ground counterpart provide NLOS communications to Army aircraft and are currently installed on the majority of aviation rotary wing platforms.

PM AME is currently working with the TPO-AB to determine the best approach to extend the life-span of the AN/ARC-220 and minimize obsolescence issues for sustainment through at least 2030. HF is the only Aviation alternative for NLOS operations if SATCOM is compromised or lost.

We have developed an HF user's course that we offer quarterly at Redstone Arsenal, AL. The course is free of charge to AN/ARC-220 and AN/VRC-100 users. For more information please contact Mr. Jeff Coffman at 256-955-3358 or *jeffery.coffman@us.army.mil*.

The Joint Tactical Radio Systems (JTRS).

The *JTRS* integration program installs and qualifies JTRS radios into both manned and unmanned platforms. Current efforts are underway to integrate the *AN/ZRC-2() AMF* two-channel radio being developed by Program Manager Airborne Maritime and Fixed Radio Systems (PM AMF) into the Apache Block 3, Black Hawk, and Chinook aircraft.

The Apache aircraft will be upgraded to the Link 16 tactical data link, Wideband Networking Waveform (WNW), and Soldier Radio Waveform (SRW), while the Black Hawk and Chinook aircraft will be equipped with only WNW and SRW.

The Shadow unmanned aircraft system has a Small Form Factor – B (SFF-B) radio set being developed by Program Manager Handheld, Manpack and Small Form Factor (PM HMS).

PM AME's JTRS integration programs also support the aerial layer of the Army's Network Integration Evaluation (NIE) events. NIE occurs twice a year at Ft. Bliss, TX and White Sands Missile Range, NM, and identifies emerging technologies for future tactical communications.

Navigation Systems

The *AN/ASN-128D*, Doppler Global Positioning System (GPS) Navigation System (DGNS), provides a combined GPS and Doppler navigation capability through an all-in-view satellite GPS receiver embedded into the signal data converter.

The AN/ASN-128D is Instrument Flight Rules (IFR) compliant and is

AN/ASN-128D, Doppler GPS Navigation System (DGNS).

certified for use of GPS as a supplementary means of navigation for en route, terminal, and non-precision approaches using the Digital Aeronautical Flight Information File (DAFIF) non-corruptible database.

PM AME is working on an upgrade to the AN/ASN-128D to obtain certification for use of GPS as a primary means of navigation. It is anticipated this upgrade will include a new control unit with a ruggedized LCD graphical display capable of displaying maps and digital approach plates.

The upgraded AN/ASN-128D will provide a growth path to meet Navigation Warfare (Military GPS and Anti Jam Antenna) and Joint Precision Approach and Landing System (JPALS) requirements.

The *Embedded GPS Inertial (EGI)* Navigation System is a U.S. Air Force led, tri-service program that provides a combined GPS and inertial navigation capability through embedding an all-in-view satellite GPS receiver for aircraft equipped with a MIL-STD-1553 digital data bus.

The Embedded GPS Inertial (EGI) Navigation System.

The EGI provides precise location to the aircraft fire control computer or integrated system processor for processing targeting information/sensor pre-pointing.

The EGI is currently being upgraded for increased security and civil airspace compatibility including IFR flight en-route through non-precision approach. Plans are to upgrade the EGI to meet navigation warfare and JPALS requirements. JPALS is based on differential GPS technology to achieve civil and military landing system interoperability for precision approach.

JPALS sea-based and ground-based systems and Army avionics systems are currently under development to provide Category I (200 ft. decision height and one-half mile visibility) precision approach capability.

Surveillance

The *Common Transponder (CXP)* is a family of transponders that includes the *AN/APX-118* and *AN/APX-123* transponders, incorporating the advanced features required in today's global military and civil air traffic environments. PM AME is in the process of qualifying the AN/APX-123, which is an upgrade to AN/APX-118, adding the new Mode 5 Identification Friend or Foe (IFF).

Efforts are underway to upgrade the APX-123 to meet the FAA mandated Automated Dependent Surveillance Broadcast (ADS-B) capability which

AN/APX-123 transponder.

provides a cooperative position, direction, and velocity report for air space managers. PM AME in partnership with the Navy has also initiated an effort for the procurement of a Small Form Factor transponder for weight challenged manned and unmanned platforms with a scheduled Request For Proposal release in FY12.

All of these navigation, communication, and surveillance systems are critical to the success of Army aviation missions ensuring effectiveness, safety, and survivability in commercial and DoD airspace and on the modern battlefield. The dedicated personnel in the AME product office continue to look to the future of technology and interoperability to bring our Soldiers the best systems possible.

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LTC James A. Bamburg is the product manager of the Aviation Mission Equipment Office, Project Management Office, Aviation Systems, Program Executive Office, Aviation at Redstone Arsenal, AL.

Standard Aircraft Towing System (SATS)

PMO AGSE COURTESY PHOTO

"The Crewchief's PM" AGSE Moving Forward

By Mr. Roderick Bellows

The Aviation Ground Support Equipment (AGSE) Product Management Office (PMO) is the life cycle manager for all common AGSE utilized within Army Aviation.

This AGSE enables our Soldiers to conduct aviation maintenance in the field and improve aviation readiness.

The AGSE PMO team is involved in every step of the lifecycle process, including development and fielding of new equipment, the modernization of legacy equipment and the Reset and repair of equipment from units returning from Operation New Dawn (OND) and Operation Enduring Freedom (OEF). We remain in constant communication with our users, ensuring our equipment meets their requirements.

The AGSE portfolio includes over 15 Acquisition Category (ACAT) III programs, consisting of 55 line item numbers and over 33 thousand separate components that are used to support every level of aviation maintenance from the crew chief at the flight company to depot level repairs conducted by the theater aviation sustainment maintenance groups (TASM-G).

Our mission is to "provide AGSE which enables and improves operational readiness" and our goal is to provide the "right tools" at the "right time" in the "right place" to support our Soldiers.

Standard Aircraft Towing System (SATS)

In response to numerous requests received from the field, the AGSE PMO accelerated the procurement and fielding of the SATS. As a result, fielding to all aviation units including selected Army National Guard Army Aviation support facilities and training units will be complete by the end of 4th quarter of Fiscal Year 2012.

The fielding of SATS to all units includes new equipment training (NET) for operators and maintainers. Maintenance on the SATS is performed using organic assets; all parts are provisioned and readily available through the military supply system.

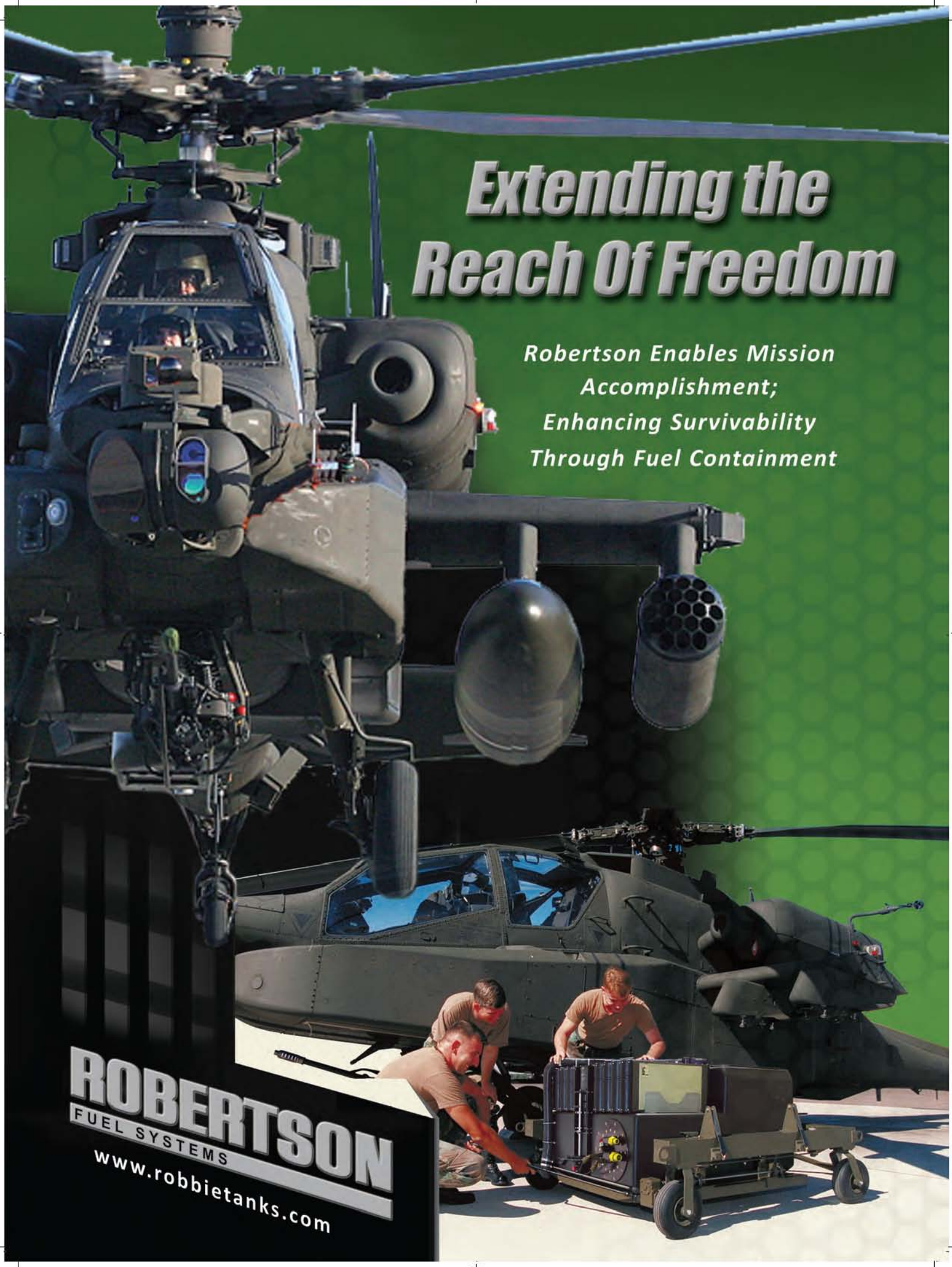
SATS with cab/crew protective system

Although the SATS was not initially equipped with a vehicle cab/Crew Protection System (CPS), user feedback identified the need for a CPS to improve mission accomplishment. Consequently, the Aviation Sustainment Division of the Training and Doctrine Command (TRADOC) Program Office-Aviation Brigades (TPO-AB), at Fort Rucker, expedited the validation of the requirement; and as a result, all systems to include fielded systems that did not initially have the CPS, will be equipped with a CPS by the end of 4th Qtr FY12.

The SATS and CPS will provide our aviation units with a common, easy to use and organically maintainable aircraft towing capability well into the future.

Aviation Light Utility Mobile Maintenance Cart (ALUMMC)

The ALUMMC will provide Army Aviation units with a lightweight, all-



PMO AGSE COURTESY PHOTO

Interior of A-92 Shop Set.

PMO AGSE COURTESY PHOTO

Shop Equipment Contact Maintenance (SECM) Van.

PMO AGSE COURTESY PHOTO

Aviation Ground Power Unit, Model E.

terrain, mobile maintenance cart that is capable of transporting Aviation personnel with their assigned tools, special tools, and test equipment across the flight line expeditiously and safely to accomplish the maintenance mission.

As an agile asset, the ALUMMC will enhance mission performance of current forces by reducing an intensive manpower and logistics burden imposed on Army Aviation units.

Shop Equipment Contact Maintenance (SECM)

The SECM is a contact maintenance vehicle (M1079A1P2 Van) designed for transporting a crew of three with mission essential equipment, expendable supplies, spares, and repair parts to fix or recover downed helicopters.

The new Aviation SECM is comprised of an environmental control unit (ECU), a storage rack system for mission equipment, a 60-Hertz electrical power inverter sufficient to operate power tools, internal and external lighting system, a portable air compressor, communication and navigation equipment, and blackout operation features.

The Light Medium Tactical Vehicle (LMTV), communication and navigation equipment are provided through a data interchange program.

Aviation Ground Power Unit (AGPU)

The AGPU Service Life Extension Program (SLEP) ended in FY11. This program upgraded all A and D model AGPUs to the E model configuration.

The effort was highlighted by the installation of many new parts to include a "zero time," 68 horsepower turbine engine, and the addition of a hydraulic sampling/purge system.

As a bridging strategy AGSE is currently partnering with Letterkenny Army Depot to build "E" model AGPUs to fill critical shortages that were identified by Department of the Army G-8 while concurrently conducting the necessary actions to identify and procure a replacement system.

We are currently working with the Aviation Sustainment Division of the TPO-AB at Fort Rucker to develop the specific requirements necessary to ensure Army rotary wing requirements are met.

Equipment Modernization

The modernization of legacy equipment is an essential part of our support to aviation units. As a result, we are currently taking actions to modernize several pieces of AGSE that have exceeded their life expectancy or are no longer logistically supportable.

One of our top priorities for 2012 is the modernization of the general mechanics, sheet metal, power plant, power train, electrical, hydraulic and technical inspection individual mechanics tool kits.

Equipment Reset and Repair for Redeploying Units

Both the AGSE PMO and the Aviation and Missile Command Aviation Field Maintenance Directorate (AFMD) manage reset of AGSE.

Reset programs currently exist for the AGPU, Generic Aircraft Nitrogen Generator (GANG), A92 Shop Set, Aviation Intermediate Maintenance (AVIM) Shop Set, Aviation Vibration Analyzer (AVA), Pitot Static Test Set (PSTS), Non Destructive Test Equipment (NDTE), Digital Aircraft Weighing System (DAWS) and the Unit Maintenance Aerial Recovery Kit (UMARK). The Reset program for the SATS is nearing completion.

Theater Provided Equipment (TPE)

The AGSE PMO has developed a TPE strategy that will better serve the needs of Soldiers when forward deployed in support of OEF. We are currently procuring and prepositioning AGPUs, GANGs, SATS, Aviation Intermediate Maintenance (AVIM)

Shop Set, and A92 Shop Sets.

Coordination is ongoing to identify the strategic locations and density required for each AGSE system at each location to provide adequate support to aviation units while forward deployed. This effort will significantly reduce costs associated with shipping, air transportation and pilferage.

Contacting the AGSE PMO

There are two web portals for communicating with the AGSE PMO to address concerns and ask questions: the Joint Technical Data Interchange (JTDI) website and the AGSE Help Ticket website. Selecting the AGSE tab on JTDI provides users quick access to a myriad of information including product descriptions, manuals, maintenance messages and component listings. To request access to JTDI go to *www.jtdi.mil* (a Common Access Card is required).

The AGSE Help Ticket website allows users to submit an equipment specific problem/question directly to our subject matter experts.

An automatic email informs users of the progress of their query during evaluation by the AGSE team, and the user receives their response via email. To use this tool go to *https://agse.peoavn.army.mil/*.

The members of the AGSE PMO team stand ready to support the aviation soldier in the field and meet the requirements of the warfighter through new equipment development and fielding, modernization, technology refreshment and Reset and repair of equipment returning from contingency operations.

Our soldiers provide the needed input for tomorrow's aviation ground support equipment solutions and requirements and we remain committed to providing them with the "Right Tool, Right Place, Right Time."

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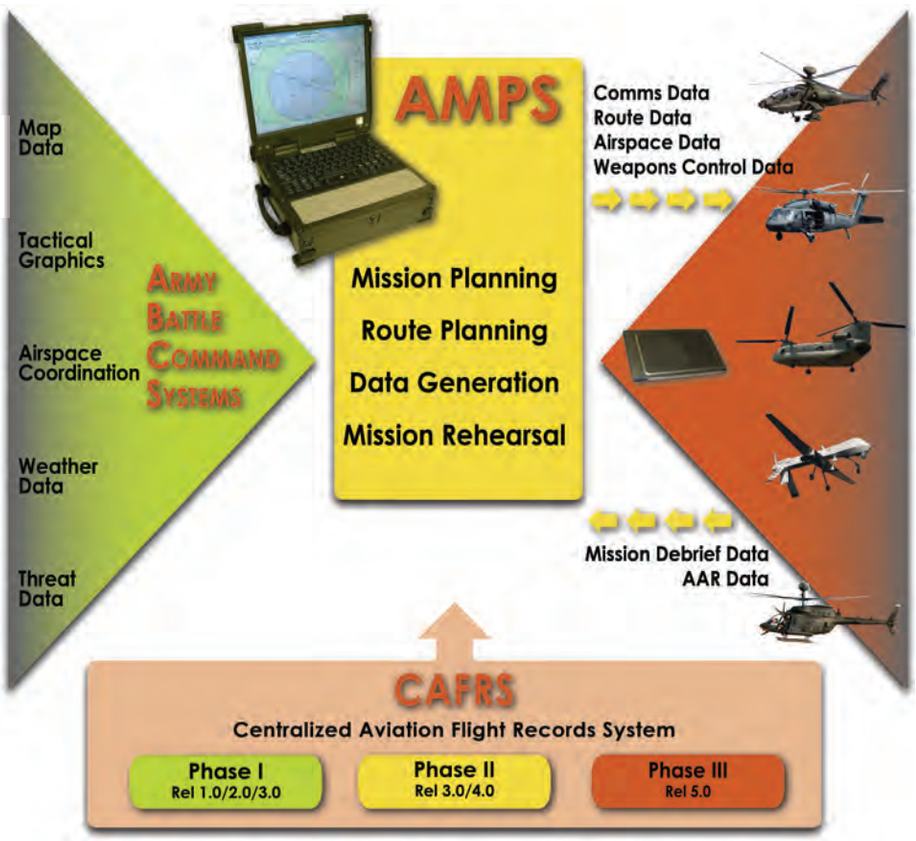
Mr. Roderick Bellows is the acting product manager for the Aviation Ground Support Equipment Product Management Office of the Aviation Systems Project Management Office, Program Executive Office, Aviation at Redstone Arsenal, AL.

SPECIAL FOCUS AVIATION PRODUCT SUPPORT

Aviation Networks and Mission Planning

By Mr. Michael Chandler



The Aviation Mission Planning System

Aviation Mission Planning System (AMPS)

The Product Director's Office for Aviation Networks and Mission Planning (PD ANMP) provides the Army Aviation Community with state-of-the-art interoperability and mission planning tools that enhance the Aviators' situational awareness, command and control, and safety.

These products are developed, deployed, sustained, and refreshed to keep current with changing technologies and advances in hardware and software to ensure mission success.

Aviation Mission Planning System

The Aviation Mission Planning System (AMPS) is a mission planning and battle synchronization tool that automates aviation mission planning tasks, including tactical command and control, rehearsal, and flight planning.

Interoperable with Army Battle Command Systems (ABCS) and associated networks, AMPS furnishes the aviation commander with continuous situational awareness, allowing for rapid adjustment and dissemination of mission plans.

AMPS products enable communication, navigation, situational awareness, and weapons systems on Army aircraft to include the AH-64A/D, CH-47D/F, OH-58D, UH-60A/L/M/Q, HH-60L/M, and unmanned aircraft systems.

Currently, AMPS hosts the Army Portable Flight Planning Software (PFPS), which allows the Warfighter to consolidate and load his aircraft with navigation, environmental, performance, and threat data.

In FY14, a significantly updated version of PFPS, newly named Execution Planner or X-Plan, will be fielded to units.

X-Plan provides the same capabilities, but improves workflow and integration as well as providing a Microsoft Office 10 look and feel.

A collaborative developmental effort between Program Executive Office, Aviation, the U.S. Special Operations Command, and the Air Force, X-Plan will expand the planning capabilities available to users across the Department of Defense.

The new capabilities include expanding the platform library consisting of special operations aircraft, ground tactical vehicles and individual foot movement.

This capability will greatly expand the value of the AMPS as an air, ground, and maritime planning tool and will leverage the Tactical Terrain Visualization System that provides users a realistic three-dimensional view of their proposed route.

An AMPS hardware refresh will begin in early FY13, expanding the performance and internal data storage capacity for aviation users.

The new hardware, known as the

PM ANMP COURTESY PHOTO

Improved Data Modem (IDM)

VT MILTOPE RLC-3G, looks more like a laptop than the current version and will provide a 15.4" display, a 2.53 Gigahertz Intel Core 2 Duo processor, 4 gigabyte (GB) of random access memory (RAM), and an ATI Radeon 512 megabyte video card. Additionally, two 640GB internal hard drives will negate the need for an external hard drive and still facilitate classified and unclassified operations.

The AMPS remains a vital mission planning and rehearsal tool for nearly all Army Aviation platforms.

Software and hardware updates in the near future will posture AMPS to provide relevant and essential mission planning and rehearsal capabilities to an expanding user community.

With the proliferation of more complex aircraft, maturing tactical networks, and an ever increasing OPTEMPO, AMPS's role in Army Aviation operations will continue to grow well into the future.

Improved Data Modem

The Improved Data Modem (IDM) is the common solution for digitizing Army Aviation. Today's IDM has its roots in the Enhanced Airborne Target Handover System (EATHS) designed to meet a 1991 requirement for Short Range Data Communication for Close Air Support.

The requirements for the exchange of command and control and situational awareness data have evolved considerably since the days of EATHS. The IDM performs as an internet controller and gateway to the Tactical Internet and Fire Support Internet for Aviation platforms.

It remains a dynamically evolving product to facilitate a digital transmission network for the sharing of sensor, situational awareness and tactical data among our digitized Army, Joint, and Coalition Aviation partners.

The IDM serves as the crucial interface between platform mission computers and radios, supporting legacy very high frequency (VHF) and ultra high frequency (UHF) radios and Blue Force Tracker (BFT).

Efforts are underway to enable future support of BFT-2.

As a single, line-replaceable unit performing communication modulation/demodulation, database processing, and message processing functions for the aforementioned aviation team members, the IDM presents a multi-path approach to command and control in the tactical environment.

As digitized Army Aviation's integrated command and control and situational awareness solution, the IDM hosts Force Battle Command Brigade and Below-Air (FBCB2-Air), processes Air Force Applications Program Development (AFAPD), Variable Message Format (VMF), and Advanced Field Artillery Tactical Data System (AFATDS) messages.

These capabilities further enhance Aviation's combat multiplicative effect and help prevent fratricide on the battlefield by providing timely target data to the Warfighter and control measures and situational awareness to battlefield commanders.

Degraded Visual Environment

The Degraded Visual Environment (DVE) system is an on-going effort to mature obscurant penetration sensor technologies for rotary wing flight operations to enable aircrews to accurately assess the landing zone and safely control the aircraft in DVE.

DVE technologies will provide Army aviators with real-time visual indication of the terrain and obstacles while performing takeoff, hover, and landing operations in a DVE.

During the execution of combat and training missions, Army aviators often encounter flight conditions that severely restrict visibility due to brownout, whiteout, or other atmospheric obscurants.

These mission profiles may place the aircrew in close proximity to natural or man-made obstacles and hazards that are not known or detected by the aircrew.

To compensate for the lack of visual acuity when DVE is encountered, the aircrews develop tactics, techniques and procedures (TTPs) to mitigate the risks and address the hazards associated with DVE.

However, DVE continues to remain a challenge to our aviators resulting in the loss of personnel, equipment and combat effectiveness.

The immediate objective for our DVE team is to analyze potential systems which will enhance situational awareness, improve aircraft safety, and increase combat effectiveness.

To meet these objectives, coordinated efforts are under way within the Program Executive Office Aviation, Project Manager Air Warrior, Aviation Night Vision and Electronics Sensor Directorate, Defense Advanced Research Projects Agency and other branches of Service to identify technologies which meet current DVE requirements.

Potential solutions to enable the full regime of flight operations in DVE will encompass a combination of active sensor technologies, enhanced flight control systems, and the integration of flight symbology.

Active sensor technologies will enable the penetration of atmospheric obscurants that restrict the pilot's visibility during landing, hovering takeoff and enroute modes of flight.

Efforts will continue to explore emerging technologies as the desired capability might be achieved through the fusion of various spectrum sensors. A key component of any future DVE system architecture is the ability to accommodate a wide variety of sensors.

As sensor technologies mature, a plug-and-play capability with a common interface will ensure the most effective sensor or suite of sensors are fused with digital terrain elevation data to provide the aviators with real-time imagery for flight operations.

Integrating these obscurant penetrating technologies on the Army's rotary wing fleet will save lives and resources while providing the commander with increased combat capabilities on the modern battlefield.

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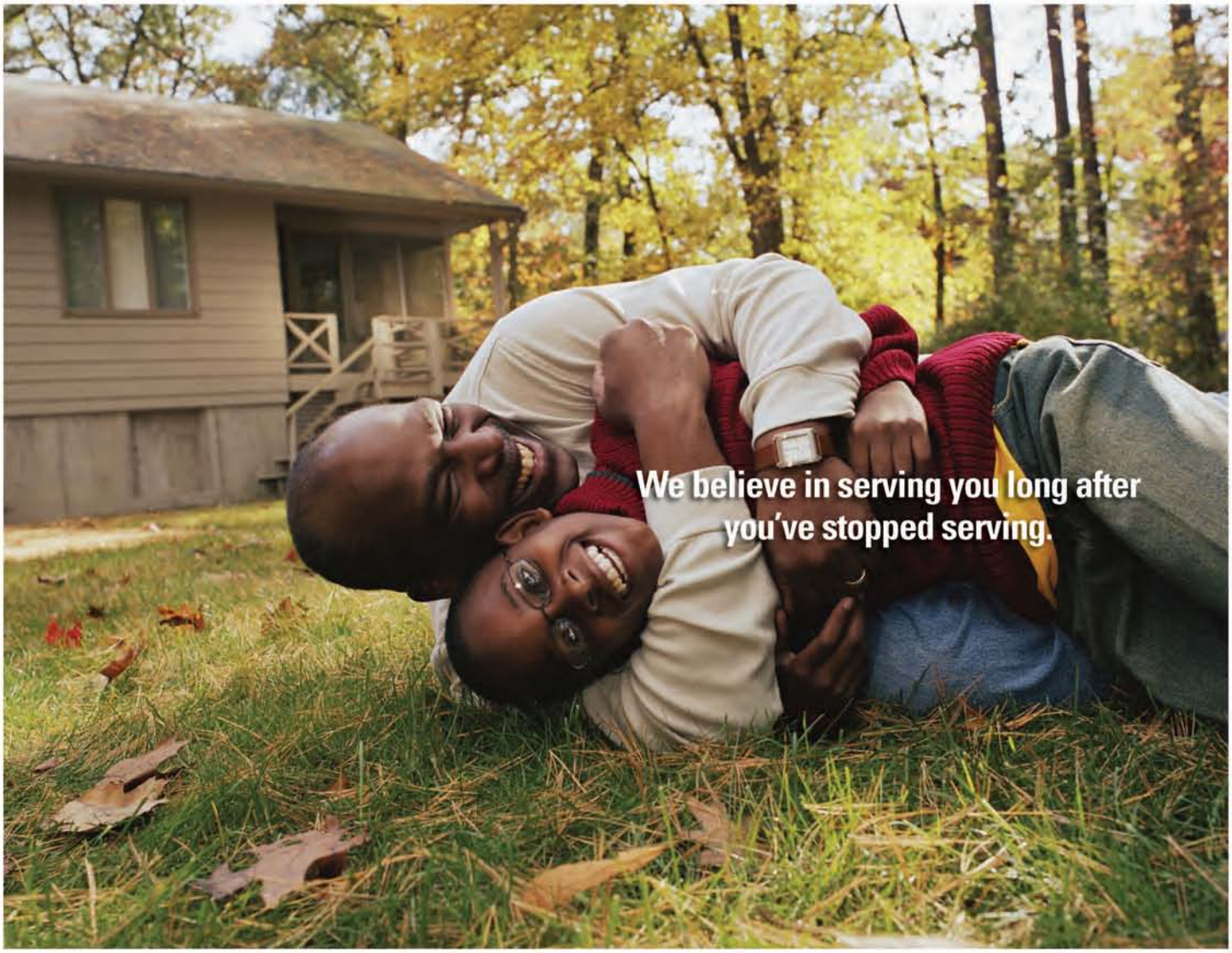
Mr. Mike Chandler is the director of the Aviation Networks and Mission Planning Product Planning Office of the Aviation Systems Project Management Office, Program Executive Office Aviation, Redstone Arsenal, AL



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HMU Installation at the FTRF on AGM 114K2AC HELLFIRE.

PHOTO BY DIANNE SIMPSON, JAMS PMO

Joint Attack Munition Systems – Evolving to Meet Army Aviation's Needs

By COL Michael Cavalier

The past year is replete with US air-to-ground tactical engagements where key targets were engaged/destroyed with a HELLFIRE missile, aviation rocket, and/or smart guided munition fired from a rotary wing, fixed wing, or unmanned aerial system (UAS).

These engagements are indicative of Joint Aviation's quest for timely and lethal solutions to support our Soldiers in contact with the enemy.

Enabling the evolving nature of Joint Aviation in its tactical, ground support role is the cornerstone of the Joint Attack Munition Systems (JAMS) Project Management Office (PMO) mission.

PHOTO BY DIANNE SIMPSON, JAMS PMO

Dianne Simpson (JAMS engineer) and Jason Wilborn (contractor with Redstone Test Center) loading a HELLFIRE II missile on the test rail for evaluation on the Modernized HELLFIRE Test Set (MHUTS) for operation at the Forward Test and Repair Facility.

The JAMS PMO and its industry partners tirelessly work the aviation, missile, and rocket domain to ensure system production and sustainment meet war-time requirements, emerging capabilities are rapidly fielded, and relevant systems are developed to bridge capability gaps.

HELLFIRE

HELLFIRE is the combat-proven air-to-ground missile of choice. In June 2011, the 30,000th HELLFIRE II missile was produced. HELLFIREs are employed from rotary wing, fixed wing and UASs. Missile variants range from the AGM-114A first produced in 1982, to the AGM-114R missile currently undergoing qualification testing prior to a scheduled November 2012 fielding.

The AGM-114R utilizes an improved fuze providing increased safe separation from the firing platform, incorporates an inertial measurement unit to improve missile trajectory control, and integrates a multipurpose warhead to reduce the logistical footprint with a single round to defeat the full spectrum of its target sets.

The HELLFIRE missile is fired from quad, dual and UAS launchers.

Legacy launchers will be replaced by the lighter M299A1 modernized 4-rail, the M310A1 2-rail, and the M801 UAS 4-rail launchers. Each addresses roll-tip-off potential at launch and component obsolescence issues. Launcher qualifications are underway and first fieldings scheduled in 2013.

The HELLFIRE PMO recently opened a Forward Test and Repair Facility (FTRF) in Southwest Asia. This facility has a limited depot test and repair capability and greatly reduces repair cycle time from 720 days to 90 days. The resultant effect is a significant improvement in operational availability and reduced repair costs.

The FTRF provides a forum to capture high-fidelity failure data coupled with missile captive carry time. By collecting information about the tactical and environmental profiles a missile experiences during its life-cycle, repairs and design changes are implemented to improve availability at reduced total ownership costs.

her·i·tage [*her*-i-tij]
Noun: transmitted from the past,
handed down by tradition

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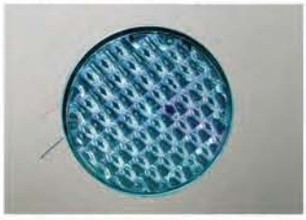
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Aviation Rockets and Small Guided Munitions.

The Aviation Rockets and Small Guided Munitions (ARSGM) Product Office provides high quality rockets and munitions to the Warfighter. Recent organizational changes enable more tightly interlaced support to the soldier by combining program management for aviation rockets and small guided munitions into a single product office.

Aviation rockets continually prove a highly successful tactical option in the fight against insurgents.

Over 210,000 rockets were produced last year alone to support the varied training and combat requirements of our joint user community.

In keeping pace with the future digitization of platforms, ARSGM has concentrated efforts on development of a lighter, more reliable Modernized Rocket Launcher (MRL) to integrate seamlessly with advancements in the aviation platforms.

The launcher will be backward compatible with legacy rockets, address Insensitive Munition (IM) requirements and allow for a smart rocket interface.

ARSGM initiated a safety, reliability, and producibility program (SRAP) to improve IM and Safety directives compliance and improve reliability. This initiative allows full and open competition on future contracts aimed at reducing costs while improving producibility.

The Small Guided Munitions (SGM) branch of ARSGM supports Navy, Marine Corps, and Special Aviation customers with precision strike munitions and engineering support. SGM set a course to evaluate small guided munitions meeting the needs of all the services. These munitions maximize stowed-kills and fulfill the requirements of being low-cost, light-weight, and precision-guided, with minimal collateral damage.

PHOTO BY CATHY WEBSTER, JAMS PMO, BCF SOLUTIONS INC.

Joe Morphew, JAMS Logistics Division, demonstrates downloading missile health monitoring data from a Version 1, HELLFIRE II Health Monitoring Unit.

PHOTO BY DEANIE BLANKINGHIP, JAMS PMO, JACOBS ENGINEERING

Aviation Rockets and Small Guided Munitions Change of Charter – (from left) COL Michael Cavalier, PM JAMS, Mr. Marv Smith, DPM, JAMS; LTC Tom Huff, PD, Aviation Rockets and Small Guided Munitions.

The SGM PMO manages the Viper Strike E glide-munition with GPS-aided navigation and semi-active laser (SAL) terminal guidance for use on both manned and unmanned aviation platforms.

Further, SGM supports the Navy's requirement to integrate the Griffin precision strike capability onto littoral combat ships and patrol craft to address sea-born threats. SGM also provides the Marine Corps' Harvest Hawk (C-130) program with Griffin and Viper Strike munitions, engineering, logistics, and product management support in the current war against insurgents.

The low collateral damage precision strike capability provided by Griffin and Viper Strike gives the platform a wide suite of capabilities available to the ground commander.

Joint Air-to-Ground Missile

The Joint Air-to-Ground Missile (JAGM) competitive technology development successfully concluded in December 2010 with preliminary design reviews completed for both contractors' systems on a growth path to achieve desired performance.

The contractor with the best-value solution to achieve the JAGM requirements will earn the four-year follow-on development contract.

JAGM is a single-variant missile to replace the Air-Launched TOW, HELLFIRE and Maverick missile families. JAGM will deliver significant capability improvements with additional targeting modes, extended range, and a multi-purpose warhead.

The JAGM System is designed around a tri-mode seeker that employs multiple sensors to locate and destroy targets through precision point or fire & forget engagements.

The robustness of the simultaneous tracking of the imaging infrared, laser, and millimeter wave seeker modes allows adverse weather, day and night engagement of stationary and maneuvering targets.

Operational flexibility is greatly enhanced with the multi-purpose warhead combining the myriad capabilities of the current family of HELLFIRE missiles into a single, multi-purpose warhead.

Survivability and force protection are upgraded with JAGM's 16 km (rotary-wing) and 28 km (fixed wing) engagement ranges. Additional system enhancements including on-board health monitoring, IM compliance, and open systems architecture affords reduced life cycle costs with a 25 year service life and modular future enhancement capability.

Condition Based Maintenance

The JAMS PMO has implemented

an extensive condition based maintenance (CBM) program across its portfolio of munitions.

The JAMS PMO is leading the Army in developing missile health monitors, maintenance process optimization initiatives, improving missile health data collection methods, and automating CBM-related data analyses that improve reliability and availability.

JAMS has developed, installed, and fielded two versions of the HELLFIRE missile Health Monitoring Unit (HMU) on the HELLFIRE II that measures captive carry hours, power-on time, HMU battery life, and temperature exposure.

The HMU is self-powered and non-intrusive and captures environmental data throughout the systems lifecycle. The HELLFIRE II HMU Version 3 unit is near developmental completion and entering first article test activities to validate its capabilities before entering production. The enhanced HMU will capture additional missile health data for vibration, shock, and humidity, enabling more thorough predictive prognostic development.

Concurrent with development of the HELLFIRE Romeo missile, is development of an integrated HMU allowing capture of the same type information as the HELLFIRE II HMU Version 3, and transmission of that data electronically directly from the missile, thru the launcher/aviation platform, the aircraft maintenance system and to CBM data storage systems.

This enables more timely data analyses supporting predictive and preemptive maintenance activities aiding improved reliability at reduced life cycle costs. CBM efforts are also being evaluated and planned for elements of the ARSGM and JAGM programs.

Summary

Our Warfighters' evolving need for air-to-ground weapon capabilities with scalable effects is demonstrated daily in today's environment of global, 360-degree warfare.

The JAMS PMO, with its portfolio of the most effective and decisive weapons on the battlefield today and into the future, continues to provide Army Aviation with the world's premiere, precision-strike, air-to-ground weapon systems.

The Soldiers and civilians of JAMS constantly strive to provide unsurpassed service to today's Warfighter and to shape our Nation's ability to deter or prosecute future conflicts.

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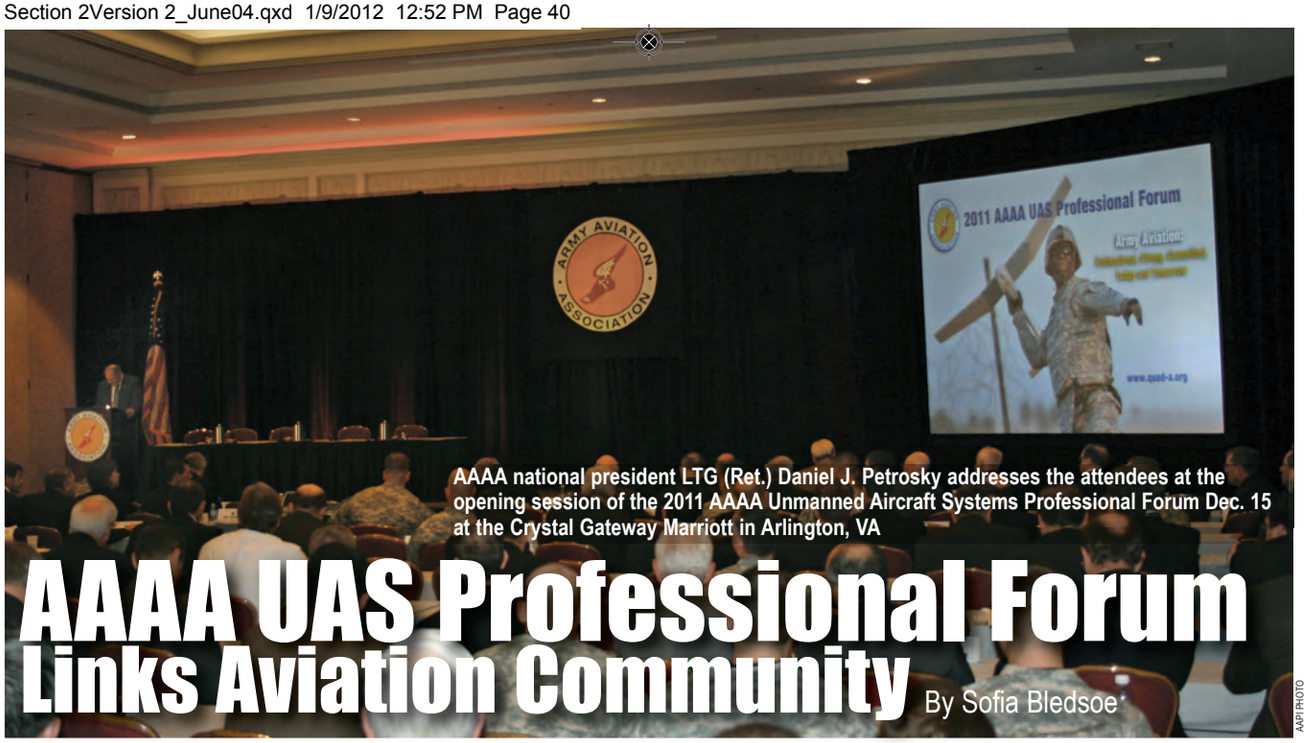
COL Michael Cavalier is the project manager for Joint Attack Munition Systems.

The following contributed to this article: Ms. Alfreda Green, the PMO logistics division chief; LTC Tom Huff, the product manager for Aviation Rockets & Small Guided Munitions; LtCol Sean Hayes, USMC, the product director for Small Guided Munitions; LTC Dave Warnick, the product manager for HELLFIRE; and LTC Ron Volkin, the product manager for Joint Air-to-Ground Attack Guided Missile (JAGM). All are assigned to Redstone Arsenal, AL.



AAAA national president LTG (Ret.) Daniel J. Petrosky addresses the attendees at the opening session of the 2011 AAAA Unmanned Aircraft Systems Professional Forum Dec. 15 at the Crystal Gateway Marriott in Arlington, VA

AAPI PHOTO

AAAA UAS Professional Forum Links Aviation Community

By Sofia Bledsoe

This year's AAAA Unmanned Aircraft Systems Professional Forum recognized not only the proliferation and importance of unmanned aircraft systems but more importantly the UAS operators that provide the indispensable linkage between ground, air, intelligence and communications forces that focuses on mission accomplishment from tactical vantage points.

The forum was held at the Crystal Gateway Marriott in Arlington, Virginia on December 14-16 and included presentations from the full spectrum of the Aviation community.

The message was clear: UAS is here to stay, and the Army must employ lessons learned to improve the next generation of UAS and how the Army develops future tactics, techniques and procedures (TTPs) to leverage the full potential of unmanned aircraft systems.

The Honorable Mo Brooks, U.S. Representative from the 5th Congressional District, AL and co-chair of the newly established Army Aviation Congressional Caucus, welcomes attendees to the AAAA UAS Professional Forum, Dec. 15 in Arlington, VA. Just two days prior, on Dec. 13, he and co-chair, the Honorable Mark Critz, U.S. Representative from the 12th Congressional District, PA, presided over the inaugural meeting of the caucus.

Leveraging the Capability

MG Anthony A. Cucolo III, Director of Force Development with the Army's G-8, was the keynote speaker at the conference and talked about the realities of "great expectations and making hard choices" in light of upcoming budget constraints.

He talked about his experience with UAVs in the battlefield in 2003-2004 when he was deployed to Afghanistan."When I got it, I saw how powerful it was, and I had this incredible desire to push imagery down as far as I could, but I couldn't. We didn't have the ability to do that at the time."

The Army has come a long way since the start of the war and by the end of the decade saw an incredibly diverse array of UAS and a new set of TTPs employed and leveraged by the teaming of manned and unmanned aircraft. But the reality is that the Army has to balance what it wants with how much it can afford.

Breaking the Code

Retired GEN Richard A. "Dick" Cody, the Army's 31st Vice Chief of the Army, spoke briefly on the last day of the conference and said that the lessons learned in understanding what UAS can bring to the battlefield over the past decade put meaning to seeing first, understanding first and acting first.

"The Army learned to focus on missions, not just platforms," he said and lauded the demonstration performed at the Manned-Unmanned Systems Integration Capability (MUSIC) Exercise held by the Program Executive Office for Aviation and led by the Project Office for UAS.

The exercise demonstrated the advancements the Army has made in interoperability and manned-unmanned teaming with the participation of all UAS platforms, the AH-64D Apache Longbow and the OH-58D Kiowa Warrior. "You have broken the code," Cody said, lauding the entire aviation community. It's not about who owns it but about who can get it when they need it, and then give it back.

"It's how you deliver that situational understanding in the context of what the commander needs."

"UAVs by themselves are wonderful, but they lack the situational awareness, situational ownership and situational curiosity." Commanders and operators have fixed that problem, he said, but it wouldn't have happened if ground control stations were located in CONUS.

Recognizing Excellence

The very best of those Soldiers that provide that capability were recognized during the Soldier and unit of the year awards ceremony on Dec. 15.

SFC Christian B. Holderith, Company A, 306th Military Intelligence Battalion (Aerial Exploitation) was recognized as Soldier of the Year for his performance with Task Force ODIN-Afghanistan where he demonstrated exceptional professionalism and expertise as a standardization operator, most

notably in his development of junior operators, mentoring of senior operators and instructors, and support provided to the chain of command.

Holderith's dedication, leadership and expertise helped Alpha Company achieve the following success: seven autonomous engagements (one in which he himself engaged) and five manned/unmanned teaming engagements that were executed flawlessly without any civilian casualty or collateral damage; no Class A, B, or C accidents or incidents in some of the world's harshest weather and terrain; and over 8,400 flight hours in support of the Nation's highest profile missions and most valuable targets of which he personally flew 535.

Company E, 160th Special Operations Aviation Regiment (Airborne) was recognized as Unit of the Year and was represented at the awards ceremony by CPT Tae E. Kim, commander and senior non-commissioned officer SFC Joseph E. Thompson. As the first MQ-1C unit deployed to Afghanistan, Company E, 160th SOAR (A) successfully executed numerous reconnaissance, surveillance, and target acquisition and close air support missions, including multiple Hellfire engagements, while providing direct support for SOF ground forces. Unit Soldiers executed the first lethal MQ-1C combat engagement and completed their tour credited with 10 enemy killed in action and 2 enemy wounded in action.

The unit successfully integrated new technologies to overcome existing system limitations while simultaneously deploying to combat under a compressed timeline. They developed and subsequently validated new tactics, techniques, and procedures for UAS operations in support of SOF.

Kim and Thompson thanked AAAA for recognizing their Soldiers and their accomplishments. "It takes Soldiers to make use of that capability and make it a valuable asset for our ground commanders," said Kim. "This award represents their tremendous contributions to Army Aviation and we are proud to accept this award on behalf of our Soldiers." Kim also thanked the more than 60 support contractors that performed duties as mechanics, pilots and analysts and were deployed with his team."They were an integral part of our operations," he said.

Thompson thanked the spouses who he says "stay in the rear and take care of the home front" adding that the Soldiers couldn't accomplish their missions without their families' support.

PM UAS COURTESY PHOTO

CPT Tae E. Kim and SFC Joseph E. Thompson, commander and senior noncommissioned officer of Company E, 160th Special Operations Aviation Regiment (Airborne), accept the AAAA UAS Unit of the Year award on behalf of the company Soldiers, from (l to r) LTG (Ret.) Petrosky; MG Barclay; Mr. Steve Reid, senior vice president of UAS programs from award sponsor, AAI Corporation; COL Baxter, and COL Sova at the awards banquet Dec. 15 in Arlington, VA.

PM UAS COURTESY PHOTO

SFC Christian B. Holderith, the AAAA UAS Soldier of the Year, receives his award from (l to r) AAAA national president, LTG Petrosky; MG Barclay; Mr. Chris Seat, vice president of programs from award sponsor, General Atomics Aeronautical Systems; COL Timothy Baxter, Project Manager, Unmanned Aircraft Systems; and COL Robert J. Sova, U.S. Army TRADOC Capability Manager, Unmanned Aircraft Systems at the awards banquet Dec. 15 in Arlington, VA.

"It is the beginning of something that I don't think we've fully realized yet that they will bring to the warfight."'We still can't imagine where we will be ten years from now and the future of what these systems will bring."

Barclay lauded the leadership and expertise of Holderith and the Soldiers of Company E, 160th SOAR (A), adding that they are setting the standards for developing TTPs and getting the Army to the next level in unmanned aircraft systems.

"But at the end of the day, it is still about Soldiers."

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Sofia Bledsoe is the public affairs officer for the Army Program Executive Office, Aviation located at Redstone Arsenal, AL.

70th Anniversary of Army Aviation Series

The Beginning

By Mark Albertson

June 6, 2012, marks the 70th anniversary of Army Aviation. Beginning with this issue, *Army Aviation* magazine will commemorate the debut of the Field Artillery aviators. Each month this magazine will feature articles that will relate the compelling saga of the origins of this salient aspect of airpower that has come to be known as Army Aviation.

And we can think of no better way to start than with the words and the thoughts of the man considered the "Father of Army Aviation," Lieutenant General Robert R. Williams.

"From Balloons to Air Mobility: The Early Years of Struggle, 1942-1954," appeared in the December 31, 1992 issue, SPECIAL FOCUS: 50 YEARS OF ARMY AVIATION. (See page 48)

General Williams' article was the lead in a series of five, followed by "Army Aviation 1955-1962: The Foundation of Air Mobility," by General Hamilton H. Howze.

"Army Aviation in 1963-1972: The 'Golden Age' Begins," by Lieutenant-General Harry W.O. Kinnard.

"Army Aviation 1973-1982: A Decade of Transition," by General Robert M. Shoemaker.

And "Army Aviation in 1983-1992: The Modern Era Arrives," by Joseph P. Cribbins.

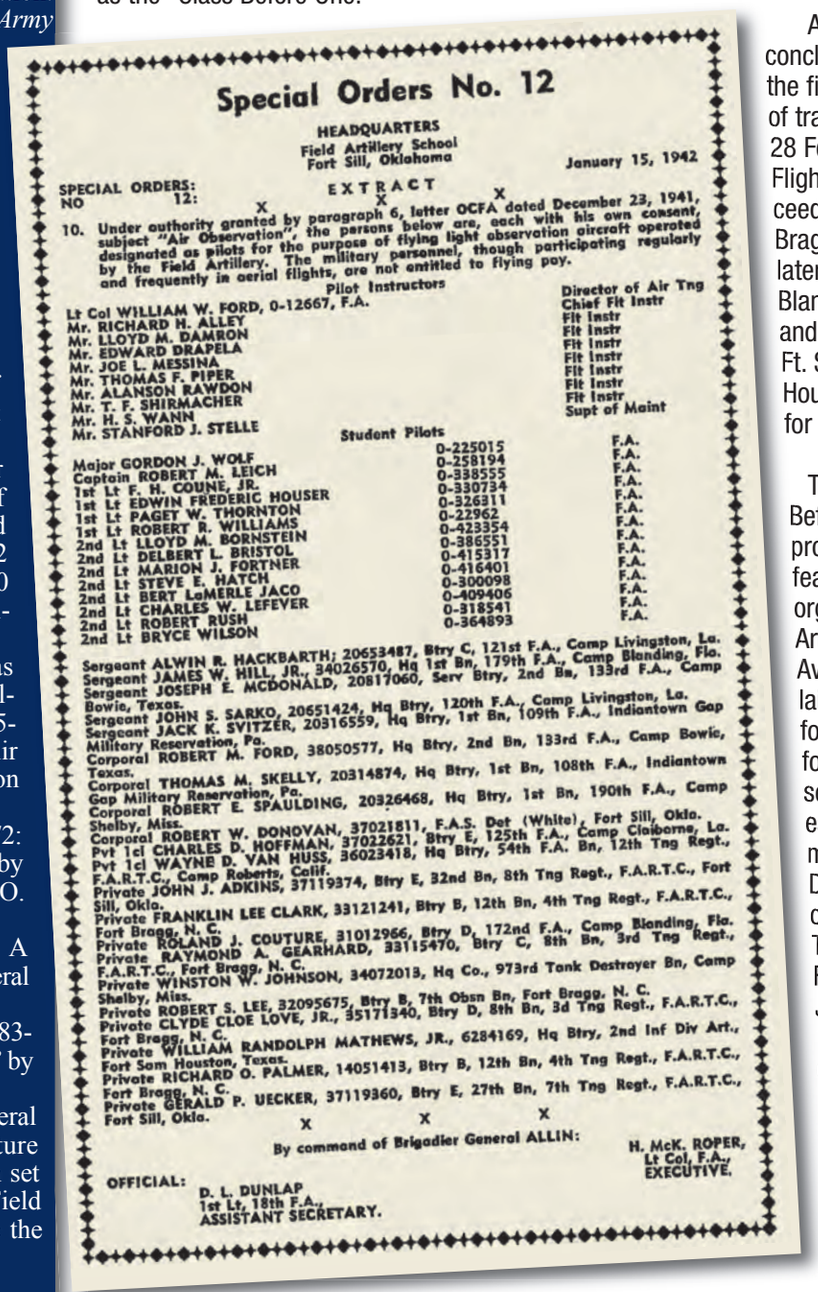
As a special prelude to General Williams' article, we feature **Special Orders No. 12,** which set the stage for the first group of Field Artillery aviators who became the nucleus for Army Aviation.

70 Years Above the Best

June 6, 1942 -2012

Five months before the official birth of Army Aviation, and barely a month after Pearl Harbor, Special Orders No. 12 was issued. This order created the first group of organic Field Artillery Aviators which has come to be known as the "Class Before One."

Consisting of 14 officers and 21 enlisted men listed below, who had already earned their private pilot licenses in civilian life, the group began training at 0730, 15 January 1942 on Post Field, Ft. Sill, OK.



Special Orders No. 12

HEADQUARTERS
Field Artillery School
Fort Sill, Oklahoma

January 15, 1942

SPECIAL ORDERS: NO 12:

EXTRACT

10. Under authority granted by paragraph 6, letter OCFA dated December 23, 1941, subject "Air Observation", the persons below are, each with his own consent, designated as pilots for the purpose of flying light observation aircraft operated by the Field Artillery. The military personnel, though participating regularly and frequently in aerial flights, are not entitled to flying pay.

Pilot Instructors

Lt Col WILLIAM W. FORD, 0-12667, F.A. — Director of Air Tng
Mr. RICHARD H. ALLEY — Chief Flt Instr
Mr. LLOYD M. DAMRON — Flt Instr
Mr. EDWARD DRAPELA — Flt Instr
Mr. JOE L. MESSINA — Flt Instr
Mr. THOMAS F. PIPER — Flt Instr
Mr. ALANSON RAWDON — Flt Instr
Mr. T. F. SHIRMACHER — Flt Instr
Mr. H. S. WANN — Supt of Maint
Mr. STANFORD J. STELLE

Student Pilots

Major GORDON J. WOLF	0-225015	F.A.
Captain ROBERT M. LEICH	0-258194	F.A.
1st Lt F. H. COUNE, JR.	0-338555	F.A.
1st Lt EDWIN FREDERIC HOUSER	0-330734	F.A.
1st Lt PAGET W. THORNTON	0-326311	F.A.
1st Lt ROBERT R. WILLIAMS	0-22962	F.A.
2nd Lt LLOYD M. BORNSTEIN	0-423354	F.A.
2nd Lt DELBERT L. BRISTOL	0-386551	F.A.
2nd Lt MARION J. FORTNER	0-415317	F.A.
2nd Lt STEVE E. HATCH	0-416401	F.A.
2nd Lt BERT LeMERLE JACO	0-300098	F.A.
2nd Lt CHARLES W. LEFEVER	0-409406	F.A.
2nd Lt ROBERT RUSH	0-318541	F.A.
2nd Lt BRYCE WILSON	0-364893	F.A.

Sergeant ALWIN R. HACKBARTH; 20653487, Btry C, 121st F.A., Camp Livingston, La.
Sergeant JAMES W. HILL, JR., 34026570, Hq 1st Bn, 179th F.A., Camp Blanding, Fla.
Sergeant JOSEPH E. MCDONALD, 20817060, Serv Btry, 2nd Bn, 133rd F.A., Camp Bowie, Texas.
Sergeant JOHN S. SARKO, 20651424, Hq Btry, 120th F.A., Camp Livingston, La.
Sergeant JACK K. SVITZER, 20316559, Hq Btry, 1st Bn, 109th F.A., Indiantown Gap Military Reservation, Pa.
Corporal ROBERT M. FORD, 38050577, Hq Btry, 2nd Bn, 133rd F.A., Camp Bowie, Texas.
Corporal THOMAS M. SKELLY, 20314874, Hq Btry, 1st Bn, 108th F.A., Indiantown Gap Military Reservation, Pa.
Corporal ROBERT E. SPAULDING, 20326468, Hq Btry, 1st Bn, 190th F.A., Camp Shelby, Miss.
Corporal ROBERT W. DONOVAN, 37021811, F.A.S. Det (White), Fort Sill, Okla.
Pvt 1cl CHARLES D. HOFFMAN, 37022621, Btry E, 125th F.A., Camp Claiborne, La.
Pvt 1cl WAYNE D. VAN HUSS, 36023418, Hq Btry, 54th F.A. Bn, 12th Tng Regt., F.A.R.T.C., Camp Roberts, Calif.
Private JOHN J. ADKINS, 37119374, Btry E, 32nd Bn, 8th Tng Regt., F.A.R.T.C., Fort Sill, Okla.
Private FRANKLIN LEE CLARK, 33121241, Btry B, 12th Bn, 4th Tng Regt., F.A.R.T.C., Fort Bragg, N. C.
Private ROLAND J. COUTURE, 31012966, Btry D, 172nd F.A., Camp Blanding, Fla.
Private RAYMOND A. GEARHARD, 33115470, Btry C, 8th Bn, 3rd Tng Regt., F.A.R.T.C., Fort Bragg, N. C.
Private WINSTON W. JOHNSON, 34072013, Hq Co., 973rd Tank Destroyer Bn, Camp Shelby, Miss.
Private ROBERT S. LEE, 32095675, Btry B, 7th Obsn Bn, Fort Bragg, N. C.
Private CLYDE CLOE LOVE, JR., 35171340, Btry D, 8th Bn, 3d Tng Regt., F.A.R.T.C., Fort Bragg, N. C.
Private WILLIAM RANDOLPH MATHEWS, JR., 6284169, Hq Btry, 2nd Inf Div Art., Fort Sam Houston, Texas.
Private RICHARD O. PALMER, 14051413, Btry B, 12th Bn, 4th Tng Regt., F.A.R.T.C., Fort Bragg, N. C.
Private GERALD P. UECKER, 37119360, Btry E, 27th Bn, 7th Tng Regt., F.A.R.T.C., Fort Sill, Okla.

X X X

By command of Brigadier General ALLIN:

H. McK. ROPER,
Lt Col, F.A.,
EXECUTIVE.

OFFICIAL:

D. L. DUNLAP
1st Lt, 18th F.A.,
ASSISTANT SECRETARY.

After the conclusion of the first phase of training on 28 February, Flight A proceeded to Ft. Bragg, NC (and later Ft. Blanding, FL) and Flight B to Ft. Sam Houston, TX for field trials.

This "Class Before One" proved the feasibility of organic Field Artillery Army Aviation and laid the foundation for the subsequent establishment of the Department of Air Training at Ft. Sill on June 6, 1942, the official birthday of Army Aviation.

FROM THE ARCHIVES
Article from the December 31, 1992 issue of ARMY AVIATION Magazine.

From Balloons to Air Mobility: The Early Years of Struggle, 1942-1954

By Lieutenant General Robert R. Williams, Ret.

The roots of Army Aviation can be traced back to the Civil War in 1861 with the formation of the Balloon Corps, which pioneered the missions of reconnaissance and artillery spotting. These two basic missions were accomplished in World War I by the Army Air Service using fixed-wing aircraft, plus a few balloons.

Between World War I and World War II, while the Army Air Corps was concentrating on increasing capabilities for what had become its primary missions—namely bombing, close air support, and air-to-air combat—the Artillery was experimenting with smaller, unsophisticated aircraft for adjustment of artillery fire.

On 6 June 1942, the War Department authorized the Artillery to have as organic two "Cub" type aircraft in each Artillery Battalion. These were flown and maintained by artillery personnel completely separate from the Army Air Force, accomplishing the same mission as the Balloon Corps in the Civil War. These were the roots of Army Aviation from 1861 to 1942.

The Army Air Force was charged with the higher echelon maintenance, supply, and procurement of aircraft for the Field Artillery. This made the Air Force the technical service supporting artillery aircraft in a role parallel to that of the Ordnance and Quartermaster Corps.

The concept of aircraft as organic to artillery units was neither applauded nor generally accepted. A senior Army Air Force staff officer wrote in a restricted memorandum, "Let the Ground Forces have aircraft and they will soon learn their lesson and be glad to give them back to us."

The Army Air Force did not actively oppose organic Field Artillery aviation; instead, they organized Air Force liaison squadrons equipped with L-5 type aircraft to be based at Corps level to compete with Field Artillery aviation for the same basic missions. Aircraft based back at Corps level under control of the Air Force flown by sergeant pilots with no knowledge of artillery were no competition for the highly responsive organic artillery aircraft operating as part of the artillery units and flown by well-qualified commissioned officers.

AAPI FILE PHOTO

LTG Williams was with the famous "Class Before One" and helped to validate the need for light aircraft in the artillery adjustment role. The first Master Army Aviator, he was Director of Army Aviation during 1966-1967, followed by a combat tour in Vietman as CG, 1st Avn Bde. He is considered the "Father of Army Aviation."

Since the Field Artillery did not enthusiastically welcome the addition of aircraft, the first group of aircraft shipped to England went to storage and the pilots to a replacement depot for assignment. Artillery battalion commanders complained that when committed to combat, the light planes would be a problem and nuisance. A big question was, what was the burden vis-à-vis the benefit?

Viability

Prior to actual combat experience, it was generally believed that the small, fabric-covered, unarmed Cubs would be highly vulnerable. Their employment was planned for very short duration low altitude, behind the lines missions to adjust artillery fire. Surprisingly, combat quickly demonstrated the high survivability of light aircraft when operated in close coordination with our antiaircraft weapons and artillery.

The enemy soon learned that the defenseless appearing Cub was actually armed with a full battalion of field artillery and that it was much healthier to hide from the Cub than to try and shoot it down, proving the adage that fewer ducks would be shot if ducks could shoot back. This point, demonstrated in World War II and again in later conflicts, is that, like the infantryman, aircraft can survive and fight in the most hostile environment if properly integrated into the combined arms team.

With proven survivability the Cub became the primary, not the emergency, means of fire adjustment. The missions for Cubs expanded and included reconnaissance, column control, medical evacuation, wire laying, and transport of commanders and staff officers. Some success was reached with wholly unorthodox anti-tank missions using bazookas fastened on the wing struts.

In January 1944, in a lengthy memorandum to the Chief of Staff, the Commanding General Army Air Forces, GEN H.H. Arnold, objected to the Field Artillery employing its organic aircraft for any missions other than fire adjustment and contended that the Ground Forces request for 185 hp L-5's went beyond the approval of "Cub" type aircraft. GEN Arnold recommended that "organic air observation for field artillery be discontinued" and that "all Air Corps property now in organic air observation for field artillery be returned to the Army Air Forces".

The use of the term Air Corps property instead of aircraft is significant. It illustrated a basic tenet of all Air Forces

that everything that flies in the military is really inherent to the Air Force and that Army, Navy, Marine, and Coast Guard aviation are aberrations.

In February 1944, LTG L.J. McNair, Commanding General Army Ground Forces, in a memorandum to the Chief of Staff, responded to GEN Arnold's memorandum as follows: "The main issue is satisfactory air observation for field artillery. The present system is outstandingly successful—one of the remarkable developments in connection with effective artillery support which is being given the infantry in all theaters.

On the other hand, field artillery air observation by the Air Force has been unsatisfactory since the advent of military aviation. There is abundant reason to doubt that the results would be otherwise if this task were returned to the Air Force." The recommendation of the Commanding General Army Air Forces was not approved.

In May 1945, the Commanding General Army Ground Forces recommended to the Chief of Staff that aircraft be made organic in additional Ground Force units. GEN Marshall, Chief of Staff of the Army, suppressed Air Force opposition by sending a memorandum to the Commanding General Army Air Forces observing that he had studied the matter and strongly suggested the AAF "go along with this wholeheartedly and not reluctantly".

The War Department approved six light planes to be assigned to each infantry, airborne, and mountain division, nine to each armor division, seven to each cavalry division, two to each cavalry squadron and separate tank battalion, one to each separate engineer battalion, and two to each cavalry group and tank destroyer group. Organic aviation now belonged to almost every branch of the Ground Forces.

In July of 1947, the U.S. Military underwent a major reorganization. The Department of Defense was created and absorbed the War and Navy Departments. The three major elements became the Army, Navy, and Air Force. The Army, like the Navy and Marines, retained its aviation.

The Struggle

During the next 10 years, the Air Force strove in a series of agreements and memorandums of understanding to limit the growth of Army Aviation by obtaining aircraft weight and mission limitations and retaining responsibility for logistical support of Army Aircraft. The most frustrating behavior of the Air Force was in carrying out its responsibility for development and procurement.

The Air Force chose to play the role of "Godfather" rather than sticking to its legal responsibility of being the Army's technical servant. The Air Force's conduct in this area is best reflected in an incident reported by GEN Jim Gavin, one of the truly great proponents of Army Aviation. In his capacity as president of the Army Airborne Panel in 1948, GEN Gavin attempted to convince the Air Force director of requirements of the Army's need for more and larger helicopters. Finally, exasperated by GEN Gavin's persistence, the Air Force general replied, "I am the director of requirements, and I will determine what is needed and what is not. The helicopter is aerodynamically unsound. It is like lifting oneself by one's boot straps. It is no good as an air vehicle, and I am not going to procure any. No matter what the Army says, I know that it does not need any."

With this kind of official antagonism, the Army was unfortunately unable to make significant progress in fulfilling its helicopter requirements before the beginning of the Korean Conflict. As of 30 June 1950, the Army had only 56 utility/observation helicopters, and no cargo helicopters in its inventory.

The Army's inability to obtain adequate quantities of the types of helicopters it required contributed significantly to the growing sentiment within some circles that the Army should obtain total control over its own aircraft development and procurement, and that it should become more involved in the tactical air support of the ground forces.

In 1949, the Army foresaw the future of the cargo helicopter in logistical support and established an experimental program with five transportation companies. A procurement program through the Air Force of H-19, H-21, and H-25 type helicopters to equip these companies was initiated. The Warrant Officer pilot program was established to fly the cargo helicopters.

In 1952, the Secretary of the Army recognized that the Army Aviation Program had become so important, expensive and controversial that there should be a focal point on the Army Staff. He directed that an office be established in G-3 responsible for "the overall supervision and coordination of the Army Aviation program".

The Army Aviation Branch with three officers was established to carry out the responsibilities. This office was expanded and elevated to Directorate level in 1955.

Korea

The Korean conflict did for helicopters what World War II did for light aircraft; it proved their utility, supportability, and survivability. Prior to Korea there was a general agreement that the helicopter had capabilities that qualified it for Army employment for some purposes; however, it faced the same doubts as the Cub experienced before World War II.

The critics and the Nay Sayers chorused that the helicopter could not survive in combat—it was too fragile and too complicated. A frequent statement heard in the Pentagon and Congress was "You can bring the helicopter down by hitting it with a rock."

Again, like the Cub, actual combat proved the helicopter's value when properly employed. It had proven survivability. Its performance in the front line casualty evacuation mission established one of its most important roles, convincing many Army leaders that larger helicopters as programmed by the Transportation Corps could make great contributions in both tactical and logistical airlift. Two companies of the Army's first cargo helicopters—the H-19—were employed in Korea near the end of the conflict.

More Controversy

The most publicized and successful mission of helicopters in Korea was medical evacuation. The mission was performed by both Army and Air Force helicopters. That situation ignited a new controversy between

the Army and Air Force at the Washington level over which service had responsibility for the medical evacuation mission. The controversy came to a quick climax, not over actions in Korea, but as a result of an incident at Ft. Bragg, NC.

During a training exercise, an Army man was injured. An Army helicopter arrived at the scene of the accident and the injured man was loaded on the helicopter for transport to the hospital. Before the Army helicopter could depart, an Air Force major flying an Air Force UH-12 arrived and ordered the injured man to be unloaded from the Army helicopter and loaded into the Air Force helicopter.

The press got the story, and so did the Secretary of Defense. The Secretary of Defense called in the Secretaries and Chiefs of Staff of the Army and Air Force. In two lengthy sessions totaling over eight hours and with no staff officers present, the five men hammered out the roles and missions questions concerning Army Aviation.

The results were promulgated in the November 1952 Memorandum of Understanding. The key points were that the Army was given the mission of medical evacuation and airlift of small units. The Air Force's reaction to the document was expressed by an Air Force general when someone referred to it as a "Memorandum of Agreement". The general said, "It is not an agreement. We would never agree to that. It is an understanding of what the Secretary of Defense directed. In addition, you should understand that the Air Force considers a small unit as being one man."

Army Aviation Unshackled

The 1952 Memorandum of Understanding removed many of the fetters from Army Aviation. In early 1953, the Army Aviation program was reviewed in depth by the Army Materiel Requirements Review Panel and based on that review, the original five experimental transportation cargo helicopter companies program was expanded to a 12 battalion program. The 12 battalion program was approved by the Joint Chiefs of Staff without controversy. Additional CH-21, CH-34, and CH-37 aircraft were procured to equip the new battalions.

A small part of the Air Force responsibility for supply of Army aircraft was transferred to the Ordnance Corps in 1949. Experience had proven that if the greatly enlarged Army Aviation program was to succeed, the Air Force's strangle hold through control of supply, procurement, and development must be broken.

In 1953, the Transportation Corps established the Army Aviation Field Service Office in St. Louis. This office, the predecessor of today's U.S. Army Aviation and Troop Support Command, took on the responsibility for logistical support for Army Aviation from the Air Force.

In 1954, the Army Aviation School moved from Ft. Sill, OK to Ft. Rucker, AL, and the Army Aviation Center was established. In 1955, the Army Aviation Board was activated at Ft. Rucker. The organization was in place, and the climate was ripe for Army Aviation to really move into Air Mobility.

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LTG Robert R. Williams (Ret.) was a member of the "Class Before One" and a former national AAAA president.

Commander Versus Flight Surgeon Flight Status Authority

By Dr. (LTC) Joseph Puskar

Q: Doc... I have two questions for you if you don't mind.

First: We have a scenario where a flight surgeon has conducted a medical exam on a non-rated crewmember. The results of that exam were satisfactory and so the DA 4186 "Medical Clearance Is Recommended…" section (block 7b) was checked and the remarks (14) were FFD (full flying duties).

However, the unit commander has "disapproved" the FFD recommendation. Obviously the DA 4186 has a block to permit this (Section D), and the supporting references (AR 40-501 and the ATB (Aeromedical Technical Bulletin) instructions confirm this, but am I correct in saying the flight surgeon is "the" authority on the validity of the examination, and that the "unit commander" has the final say on whether he is FFD or DNIF (duties not including flight) in a sense?

Because there isn't a place on the form where the unit commander can say "Yes, I accept the fact that you have received your annual medical exam, but I say that you are not FFD (fit for duty) in my unit so I will be overriding the FFD in the remarks and I will consider you DNIF;" we don't have that ability to make that distinction.

Surely this has come up before...right? This is an important distinction because we are trying to separate the medical exam completed part from the persons' ability to perform aircrew duties as authorized by the unit commander part. Do you see where I am coming from?

Second: Both AR 40-501 and AR 600-105, read that the immediate commander "may only remove" the temporary medical suspension "upon" favorable recommendation by the flight surgeon.

What I get out of this and earlier references is that a commander can override the flight surgeon to put the aircrew down (DNIF), but that the commander "must have" a favorable recommendation by the flight surgeon so as to put the aircrew member back up (at least in the case of a temporary medical suspension).

Do you agree or am I misreading that? And I am aware that waivers and things above a unit commander would require the appropriate commander to "approve" as the ATB stated. Thanks...pfw

FS: Paul,

Yes – I agree with your interpretation of the regulations; the English language is fairly concrete in the sentences you quoted.

In the greatest context or view of the DA 4186 as stated right across the top of the form however it is a "Medical Recommendation For Flying Duty," and the commander makes the ultimate decision of the flyer's disposition. It is pretty rare that commanders go against the flight surgeon's recommendation, and they assume responsibility for any adverse outcomes if they do, but it does happen.

There are other ways for a flyer to be removed from flight status, but the DA 4186 may be the quickest and most convenient way to affect this in some cases. We're just speculating in this case, but perhaps the commander is using the DA 4186 in this fashion for reasons of convenience as alluded to above rather than a medical reason? There could be a non-medical situation we're not aware of that the commander feels would adversely affect the flyer's mission readiness.

I've heard historical accounts of commanders going against the flight surgeon's recommendation in order to accomplish the mission, for example during the daylight bombing campaign by the Army Air Corps/Army Air Forces in Europe during WW II.

The "Mighty 8th" AAF was forced to fly bombing missions with sick gunners, engineers, bombardiers, radio operators, and even pilots sometimes due to being critically short-handed of personnel.

Even the flight surgeons got involved by perforating aviator's eardrums before missions to relieve pressure and enable them to "clear" their ears or equalize pressure at altitude and during climb and descent in cases of severe otitis media, for example.

These sorts of events are rare these days thankfully! And keep an eye out for a replacement for the DA 4186 "upslip": a joint DD form that has been worked on by all the service branches, and has been approved by all, but is currently being reconsidered by the U.S. Air Force.

The DD number has not been finalized, but the form should help clear up many of the ambiguities of the current forms in use by the different branches.

Push It Up! Scouts Out! And See you at the flight line!

Doc Puskar

Question for the Flight Surgeon?

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

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

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

Chapter Affairs at the Annual Forum

By COL (Ret.) Robert D. Carter

The Army Aviation Association of America Annual Professional Forum and Exposition provides a tremendous venue as a professional forum for industry and organizational displays and a great time to re-establish old friendships or start new ones. It dovetails with MG Crutchfield's imperative of "Professionally developing the Aviation force."

The Annual Forum also provides an opportunity to update your information on the current and planned activities and initiatives for your Association. There are numerous meetings embedded within the Forum's Schedule of Events to enable discussion of chapter activities.

I will highlight the meetings that are established to provide information on your chapter affairs subjects.

The ***National Executive Board (NEB) Meeting*** will occur on Sunday, the first of April, prior to the official start of the Forum. If you are a chapter president who represents 150 members or more then you are a member of the National Executive Board and will receive a separate invitation to this event. This meeting will focus on the actions and initiatives since the last NEB meeting, as well as any new business.

The Association's ***Annual Meeting*** will also occur that afternoon. All AAAA Chapter leadership and members are encouraged to attend. Subjects will include all Association initiatives and the Annual Membership awards will be presented.

The ***AAAA Scholarship Lunch*** is scheduled for Monday. During the lunch, the Scholarship Foundation will provide an update and various organizations will make donations to the Foundation's fund.

Later that afternoon, the ***AAAA Scholarship Foundation Board of Governors*** will have their meeting. Even though I was not a member of the Scholarship Foundation Board, as a chapter president I found observing the BOG and their activities a great opportunity for my own professional development. The information I learned from this meeting provided tremendous insight into discussions and decisions we would have at chapter level for improving our scholarship participation.

The National Executive Board (NEB) meets during the 2011 AAAA Annual Professional Forum and Exposition in Nashville, TN.

AAPI PHOTO BY RENE BIDEZ

Tuesday's schedule includes the ***AAAA Membership Committee*** meeting. Your vice president for membership, CW5 Mark Grapin, will lead discussions on membership trends, initiatives, and challenges. Again, a great opportunity to gather ideas to enhance your chapter membership program.

Tuesday also has the ***AAAA NEB and Chapter Presidents Session*** on the agenda. The National Executive Group (NEG) officers will provide updates and be available to answer questions and entertain initiatives from the leadership at large.

Tuesday will close with the ***AAAA Chapter Reception*** that night; each chapter's participation is greatly appreciated as they host a memorable event for this year's Forum.

Chapter presidents should expect a request in the near future from National to support the reception.

There are two additional areas that I would like to highlight concerning this year's Forum.

First, our ***Spouse's Professional Sessions***. The schedule has numerous spouse events that provide a breadth of information and opportunities to enhance chapter activities. I don't want to steal these folks' thunder so just be aware of these events.

Lastly, I want to highlight a program that your Association provides but normally chapters do not exercise.

National will subsidize each chapter's ***Soldier of the Year*** to the Annual Forum. This is a great opportunity to recognize an outstanding young Soldier and further develop him or her professionally. All the chapter has to do is get the Soldier to Nashville.

The Association will provide the rest, to include room and tickets to selected events for the Soldier and spouse. Guidance will be forthcoming from our National Office about this initiative in the near future.

I hope this provides some ideas about what to plan for regarding this year's Annual Forum. If you have any questions, remember my email is *bob.carter@quad-a.org* – drop me a line.

See you next month and thanks for the opportunity to serve the Aviation Soldiers and their families.

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COL (Ret.) Bob Carter
AAAA Vice President for Chapter Affairs

How Will We Have Spent Our Fifteen Minutes of Fame?

By CW5 Mark W. Grapin

I have penned in articles past how my sons – Eric and Sean – and I navigated the Board of Zoning Appeals process in our home county of Fairfax, Virginia. Our humble and halting efforts to secure a special zoning permit for the boys' treehouse finally bore fruit in a 5-to-0 unanimous approval by the Board.

Modest local press became a substantial front-page story on a slow news day, which springboarded to radio and television interviews on an end of the scale we never expected to find ourselves. Television, radio and newspaper interviews became daily events, with microphones thrust into the boys' faces asking how they felt about the potential of their treehouse having to be torn down if the Board so ordered. It was following our initial decline by the Board that visibility for their treehouse cause waned just as quickly as it ebbed; and it was upon hanging up the phone after the first cancellation of an interview that I commented aloud, "I think our fifteen minutes of fame has run its course."

By a fluke of living on a corner lot, and a county ordinance which stipulates such lots have two front yards – and our having built the boys' treehouse in what we considered a side yard, the boys were ill-prepared for the overnight thrust into the limelight.

They came to the war with the Army they had – not the Army they wish they had. And now, just as the words for this article are pecked onto my computer screen, the last words have been spoken in our tug-of-war over a treehouse, and the issue retired in their favor.

Our Army will likely be substantially withdrawn from Iraq as the echo of the county gavel falls a half a world away, and it begs much the same question of how well did we invest our fifteen minutes of fame.

Fiscal year 2013 is sure to be of glass chewing across the Department of Defense, with ends of belts across service waists poised to pull hard and tighten for what is sure to be a rough fiscal year 2014. As congressional pens poise to line through several zeroes in Defense budgets, how will our phenomenal aviation service across both of the combat theaters and scores of actions be remembered?

The cohesion of aviation and infantry has never been tighter, but when scalpels appear to trim Army budgets, what will survive? We owe so much to the countless Army aircrews who brought their passengers and cargo home safely, delivered fatal ordnance to dispatch our enemies, and rescued disaster survivors across the nation and around the globe. How deep the recognition of this debt runs in the halls of congress, and in oak-lined offices in the Pentagon, is now beyond the influence of OIF/OND.

Quad-A plays a crucial role on a hundred different fronts – both while the limelight and fifteen minute clock are running, and making sure this investment continues to bear the correct interest. And as the priority of budgets shift from the warp speed development of new products for the combat theater, to ensuring program and product development remains commensurate with our Army's mandate to respond to the call of our national interests, it is the connectivity of our professional association from those who man the consoles, cockpits and hangar backshops, to those who wield the fiscal pens which is certain to play a more critical role than ever.

Army Aviation Caucus Takes Flight

One of the single most important aspects of our membership in the Army Aviation Association of America is the time we spend with the highest levels of those who shape Army Aviation, and those who control the purse string as a gateway thereto. Most recently an Army Aviation Caucus has been established in Congress, to which Quad-A is certain to be a key source of information.

PHOTO BY ERIC M. NELSON

Three U.S. Army UH-60 Black Hawks fly over the Swords of Qādisīyah in Baghdad. With continuing commitments across the globe, how budgets will be developed depends in no small part on how we have invested the past decade. Quad-A works hard to ensure the message of this success remains fresh.

This isn't lobbying – particularly in the sense that has received so much bad press for the sometimes slippery periphery upon which this entire industry seems to navigate; rather, a source of reliable information upon which critical discussions and decisions are often based in determining issues ranging from equipment to force structure, to stationing plans, and beyond. By itself, this respectful access to such an influential body is worth every nickel of our membership dollars.

It is most comforting to know that the return on investment of our membership dues reaches far beyond mere access to a caucus, a world-class magazine, and a great national forum.

Continued Progress in Other Membership Initiatives

If you're deployed to the combat theater, don't forget to send us word to renew your membership at no cost for the year. Details on each of the Membership programs are further described in the AAAA *InfoFile*, and I welcome your questions at *mark.grapin@quad-a.org*.

❖❖

CW5 Mark W. Grapin
AAAA Vice President for Membership

25th Combat Aviation Brigade Opens a Family Support Center

By Judy Konitzer

My thanks to SGT Daniel J. Schroeder, 25th Combat Aviation Brigade Public Affairs, for submission of this information. I also welcome the opportunity to hear from your units about individual family programs that you would like to share with all members of our Aviation community.

PHOTO BY SGT DANIEL J. SCHROEDER, 25TH CAB PUBLIC AFFAIRS

COL Frank W. Tate (second from left), 25th CAB commander, CSM Jesus Ruiz, 25th CAB CSM, Iris Spires (left), a family member from 209th Avn. Spt. Bn., and Sheila Whisnant, a family member from 2nd Sqdn., 6th Cav. Regt., cut a ribbon opening the new 25th CAB Family Support Center at Building 102 on Wheeler Army Airfield, Hawaii, Nov. 22.

Strong families are the backbone of our Soldiers and therefore our Army. However, every day that our Soldiers continue to be deployed is a day that adds a full measure of stress to our families. We are thankful that our Army leadership continues to ensure that the best resources are available to alleviate at least some of that stress.

Unfortunately we also continue to hear that sometimes these resources are not readily accessible or at least not readily known to some, especially when they are new to the Army, new to a unit, or when they need it the most.

Perhaps it is just an unwillingness to attend pre-deployment briefings, or perhaps it is being so new to the Army that a family member is unaware of the resources available, or perhaps it is feeling that one has heard it all before, without realizing that there is always something new to be learned, if and when the need arises.

Regardless, in order to get one step

Let's Hear from Our Male Spouses

Last August I read an article about male spouses and the fact that they cope with added challenges when they marry military wives. That probably goes without saying. It did peak my interest, however, and I wondered how many male spouses we have in the Aviation community and how they assimilate into a variety of units to include Active, Reserve, and National Guard across the spectrum.

So, I set about contacting numerous commanders and family readiness support assistants to enlist their aid in contacting some of these spouses. To date I have only had one response from a male spouse in Korea. I would love to hear from more before sharing his thoughts and compiling some insights as well as helpful thoughts.

Some of the questions I fielded were:

- Do you feel comfortable going to FRG meetings and being in the minority?
- Do you have a job that allows you to relocate to be stationed with your wife or did you have to find employment once there?
- If your wife deployed, would you stay at the current location or relocate?
- Do you have children, and if so, would you be the primary caregiver if your wife deployed?
- How would that affect your career?
- Have you met other male spouses with the same situation?
- Were you at Ft. Rucker or Ft. Eustis when your spouse attended school?
- Are you dual military and does that make a difference? For example, if the male spouse is enlisted and the wife is an officer?
- Do you feel that you have adequate resources to help you when needed?
- Have you attended pre-deployment / re-integration briefings?

Please send me any other thoughts that you feel would be of interest and/or helpful to our male spouses in the Aviation community.

N E W S S P O T L I G H T

PM NSRWA and Joint Team Provide New Afghan Primary Trainer

By LTC Jeffery G. Bouma

The Afghan Air Force received six MD-530F aircraft on Dec. 12, 2011 from Project Manager Non-Standard Rotary Wing Aircraft (PM NSRWA). The aircraft will be utilized to train Afghan pilots in the Undergraduate Pilot Training (UPT) Program at Shindand Air Base, Afghanistan. The UPT Program, a joint effort between the U.S. Air Force, Army and Navy, is a robust program which will provide both fixed and rotory wing training to students. Those aviators who track rotary wing will begin their training in the MD 530F then move to the more advanced Mi-17. Fixed wing students will begin their training in the Cessna 182 then move to the Cessna 208. Initial training began in mid-December, 2011 with seven Afghan air force lieutenants and is the first undergraduate pilot training held exclusively inside Afghanistan in more than 30 years.

LTC Jeff Bouma is the MD 530 team chief with the 444th Air Expeditionary Advisory Squadron, U.S. Air Force located at Shindand Air Base, Afghanistan.

444th AEAS COURTESY PHOTO

The MD 530 Team pose with one of the new aircraft at Shindand Air Base, Afghanistan, Dec. 12, 2011 following the rebuild and acceptance of all six aircraft. Pictured are (from left): Mr. Richard Trudeau (Logistics Manager, Non-Standard Rotary Wing Aircraft PMO), Mr. Seth Morgan (Security Assistance Management Division), Mr. Matt Swisher (MD Helicopters, Inc. director of Military Programs), LTC Shawn Powell (NSRWA PMO), LTC Jeffery G. Bouma (Afghan Team Chief), CW3 Randall D. Jaynes, Jr. (MD 530F standardization pilot), and Mr. James Wilson (NSRWA technical lead)

444th AEAS COURTESY PHOTO

The first 3 MD 530F aircraft arrive at Shindand Air Base, Afghanistan Dec. 1, 2011.

ahead for future deployments and to help its families remain strong the 25th Combat Aviation Brigade (CAB) opened the doors of its new Brigade Family Support Center (FSC) on November 22, 2011 in Building 102 on Wheeler Army Airfield, Hawaii.

COL Frank W. Tate, 25th CAB commander and CSM Jesus Ruiz, 25th CAB CSM, along with several family members took part in the ribbon cutting ceremony to officially open the FSC. The purpose of the FSC is to consolidate a collection of resources ranging from a children's room to a computer lab for spouses to keep in contact with their deployed service members.

The Internet Café with six computers and web cams is due to open in January. Most importantly, however, the FSC is there to provide military assistance whenever spouses and family members need it and best of all in one familiar location.

"The FSC is very critical and important for family readiness on upcoming deployments," said CSM Ruiz. "It is very useful for families new to the Army and to the unit to be able to go to a one-stop shop and be able to solve any issue, concern, or problem that arises."

Currently, the FSC provides personnel from paralegal, a rear detachment chaplain and assistant, the CAB Family Readiness Support Assistants (FRSA), representatives from each battalion, squadron, and Headquarters and Headquarters Company, and a Military and Family Live Consultant (MFLC).

"Family readiness is essential to deployment readiness," said MAJ James Fischer, 25th CAB rear detachment commander. "Soldiers in combat must know that their families are safe and that if a problem arises, they will have the resources at their disposal to address it."

CSM Ruiz said, "The FSC came together with a lot of teamwork from the units, families, Hawaii Army Garrison, and the family readiness support assistants from the brigade. They did a very good job with the center."

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

Industry News

And Announcements Related to Army Aviation Matters

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

Goodrich Delivers 1,000th Laser Warning System

GOODRICH COURTESY PHOTO

On Dec. 7, 2011 the Army accepted delivery of the 1,000th AN/AVR-2B Laser Detecting Set (LDS) from the Goodrich Corporation during a ceremony at the contractor's facility in Danbury, CT. Connecticut Governor Daniel Malloy; BG Harold J. Greene, Program Executive Officer, Intelligence, Electronic Warfare, and Sensors; and COL John R. Leaphart, Project Manager Aircraft Survivability Equipment, participated in the ceremony. The first AN/AVR-2B was delivered in November 2006 with an Army objective to ultimately buy 1,880 systems. LDSs are being integrated on the Army AH-64D Apache, UH-60L Black Hawk, and OH-58D Kiowa with plans to begin integration on the CH-47 Chinook in Fiscal Year 2012.

ULTRAX Aerospace CH-47 Engine Torquemeter Test Set Approved

ULTRAX AEROSPACE COURTESY PHOTO

ULTRAX Aerospace announced on Dec. 15 it received approval from the U.S. Army Aviation Engineering Directorate and the Cargo Helicopter Program Office for delivery of their new CH-47 Engine Torquemeter Test Set The H-47 ETTS Pod Set, PN 09-1009-02, provides fast, complete and accurate testing and adjustment of the T55 Engine torque meter system on both engines simultaneously with no warm-up time.The new set performs all setup calculations automatically and also allows torque split testing.

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

AAI Corp., Hunt Valley, MD, was awarded a $10,099,792 cost-plus-fixed-fee contract to provide for the modification of an existing contract to option for weapons integration for the Shadow 200 unmanned aircraft system. Work will be performed in Hunt Valley, MD, with an estimated completion date of Dec.12, 2012.

The Boeing Co., Mesa, AZ., was awarded a $7,518,959 firm-fixed-price contract to provide for the logistics support services for the AH-64D Apache low rate initial production. Work will be performed in Mesa, AZ, with an estimated completion date of Feb. 28, 2014.

The Boeing Co., Mesa, AZ, was awarded a $141,318,475 firm-fixed-price contract to provide for services in support of 30 Apache AH-64D attack helicopters for Taiwan. Work will be performed in Mesa, AZ, with an estimated completion date of Dec. 30, 2017.

EADS North America, Inc., Arlington, VA, was awarded a $212,703,701 firm-fixed-price contract to provide for the modification of an existing contract to procure 39 production aircraft in support of the Army's Light Utility Helicopter Program. Work will be performed in Columbus, MS, with an estimated completion date of Nov. 30, 2013.

King Aerospace, Inc., Addison, TX, was awarded a $28,162,091 firm-fixed-price contract to provide life cycle contract support for the Airborne Reconnaissance Low DeHavilland Dash-7 aircraft fleet. Work will be performed in El Paso, TX, with an estimated completion date of Dec. 31, 2014.

Lockheed Martin Corp., Mission Systems and Sensors, Owego, NY, was awarded a $23,864,671 firm-fixed-price contract to provide for the procurement of four modernized radar frequency interferometer for Apache AH-64 helicopters. Work will be performed in Owego, NY, with an estimated completion date of Dec. 31, 2013.

Longbow, L.L.C., Orlando, FL, was awarded a $13,726,041 firm-fixed-price contract to provide for the modification of an existing contract in support of supply and repairs for the Apache AH-64D helicopters. Work will be performed in Orlando, FL, with an estimated completion date of Dec. 31, 2012 .

M7 Aerospace, L.P., San Antonio, TX, was awarded an $11,791,664 firm-fixed-price contract to provide for the procurement of life cycle contractor support services for the Army fleet of C-26 Metroliner aircraft. Work will be performed in San Antonio, TX, with an estimated completion date of Dec. 31, 2014.

Advertisers Index

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PEOPLE ON THE MOVE

AVIATION GENERAL OFFICER ASSIGNMENTS

U.S. ARMY PHOTO

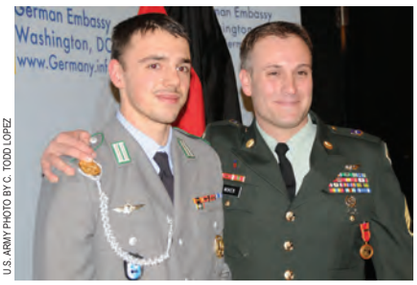
The chief of staff, Army announced on Dec. 5 the assign-ment of ***BG Theodore C. Harrison***, deputy chief of contracting man-agement, U.S. Army Corps of En-gineers, Washington, DC, to commanding gener-al, U.S. Army Expeditionary Contracting Command, Redstone Arsenal, AL.

AWARDS

Flight Medic Awarded German Medal of Honor for Gallantry

U.S. ARMY PHOTO BY C. TODD LOPEZ

German Ambassador Peter Ammon presented U.S. Army ***SSG Peter M. Woken*** with the German Medal of Honor for Gallantry in Action, which is similar to the American Silver Star, dur-ing a ceremony at the ambassador's home in Washington, DC, Dec. 8, 2011 while US Army vice chief of staff, GEN Peter W. Chiarelli (far left) looks on. Ammon told those gathered that an entire nation is thankful for Woken's actions in Afghanistan which saved the life of German Cpl. Tim Focken. Focken was shot Oct. 7, 2010 when his German ground patrol at Qala-ye Zai, Afghanistan, came under enemy fire. After receiving immediate medical assistance from German army medics, Focken boarded an American Black Hawk helicopter where flight medic Woken tended to the injured soldier's wounds during travel to a military hospital. Woken, now part of the Warrior Transition Unit at Fort Hood, Texas, is the first American to receive the medal on American soil. Seven other U.S. soldiers involved in saving Focken's life also received the medal which was present-ed to them in theater by German Defense Minister Thomas de Maiziere.



U.S. ARMY PHOTO BY C. TODD LOPEZ

German army Cpl. Tim Focken and U.S. Army SSG Peter Woken meet following a ceremony at the home of the German ambassador in Washington, D.C., Dec. 8, 2011.

DFC Awarded to Benson

U.S. ARMY PHOTO BY STEPHANIE JOHNSON, PEO AVN PAO

CW4 Patrick C. Benson, system safety officer for the Unmanned Aircraft Systems Project Office, was recognized with the Distinguished Flying Cross Nov. 23 during his retirement cer-emony at Redstone Arsenal, AL. MG William "Tim" Crosby (left), Program Executive Officer for Aviation, presented the award and saluted Benson for the selfless sacrifices he and his family made during his 20 plus years of service to the Army. On Sept. 8, 2009, during his third combat deployment as an OH-58 Kiowa Warrior helicopter pilot, this time with the 7th Squadron, 17th Cavalry Regiment, 101st Airborne Division (Air Assault), in the Regional Command East in Afghanistan, he and his co-pilot, then CW2 Adam C. Stead, were attacked and hit by small arms ground fire in the Shuryak Valley as they protected a MEDEVAC operation to pull two wounded Soldiers from the area. The hit injured Stead, who was left unconscious from a bullet wound to the left rear of his head. Benson was hit in the right leg and thigh by a round of shrap-nel; much of the floor of the aircraft at his feet was missing. He was able to recover the air-craft and fly to Combat Outpost Able Main in Kunar, Afghanistan, where the two pilots received medical aid and were flown out of the area. Both underwent several surgeries and long months of rehabilitation.

Edwards Awarded Soldier's Medal

U.S. ARMY PHOTO BY SSG JOE ARMAS, 1ACB PUBLIC AFFAIRS NCOIC

CPT Dennis J. Edwards (right), an operations officer assigned to 2nd Bn., 227th Avn. Regt., Task Force Lobos, 1st Air Cavalry Brigade, 1st Cavalry Division, originally from Baton Rouge, LA, is presented with the Soldier's Medal, the Army's highest peacetime award for valor, by LTG Curtis M. Scaparrotti, commander, International Security Assistance Force (ISAF) Joint Command, Dec. 1, in a ceremony at Camp Marmal, Afghanistan. Edwards received the award for his efforts to extract two drivers whose vehicles had caught fire during a traffic accident in Killeen, Texas on the morning of Jan. 27, 2011. According to the citation, Edwards ran to the scene, pulled the first driver out of the passenger side door then went to the sec-ond vehicle, which was catching fire as well, and extracted the second driver with help of a few indi-viduals who happened to be within the vicinity.

Three Night Stalkers Earn Broken Wing Award

Three pilots assigned to the 160th Special Operations Aviation Regiment (Airborne) received the Broken Wing Award, Dec. 12. ***CW3 Steve Love, Richard T. Nielsen*** and ***Bryan P. Young*** were presented the award from the U.S. Army Safety Center for their skill, judgment and tech-nique during two separate in-flight emergencies by COL John Thompson, 160th SOAR commander. The Broken Wing Award recognizes aircrew members who demonstrate a high degree of pro-fessional skill while recovering from an in-flight

ALL PHOTOS 160TH SPECIAL OPERATIONS AVIATION REGIMENT

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PEOPLE ON THE MOVE


CW3 Young

failure or malfunction requiring an emergency landing. Love and Young were able to safely bring down their MH-47 Chinook helicopter after experiencing a complete hydraulic failure as a result of enemy fire. Under zero illumination and in extremely restrictive terrain, they maintained control of the aircraft, selected a suitable area and executed an emergency landing. During his flight, Nielsen and crew received significant battle damage to their MH-47 Chinook helicopter from massive amounts of machine gun fire and RPG shrapnel which resulted in a cabin fire along with multiple emergencies to the hydraulic, flight control and engine systems. According to the citation, Nielsen's composure under pressure and appropriate response to multiple emergencies prevented what could have been a catastrophic accident and loss of life. Both helicopters are still serving in the 160th SOAR fleet today.

Final A-Model Apache AQC


WIATS COURTESY PHOTO BY SGT TERRY CHRISTOPHER

(Left to right) 1LT Chris Reichert, 1st Bn., 149th Avn. Regt., TX ARNG; CW5 (Ret.) Thomas R. (Tom) Breit, AH-64A SP; CW4 (Ret.) Michael (Mike) C. Hillwig, AH-64A SP; and WO1 Lance Brown, also of 1-149th on the ramp of Silverbell Army Heliport at the Western Army Aviation Training Site in Marana, AZ, following the last flight of the last AH-64A Aircraft Qualification Course conducted for the US Army. The "A" Model served the Army well; the first formal class AH-64A AQC was started at Ft. Rucker in March 1985, and 26 years later, this is the last class. With Idaho and Texas dropping their aircraft from their fleets in the next couple of months, the A model will be no more. Breit and Hillwig are contractors for S^3 Corporation, and will be migrating to other instruction duties; Reichert and Brown have returned for duty to TX.

FLIGHT SCHOOL GRADUATES

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

36 Officers, November 30

IERW AH-64D Track
WO1 Steven M. Gibson * **– DG**
LT Porter Smith * **– DG**
LT James Raymond * **– HG**
WO1 Drew A.Schloderer **– HG**
WO1 Joseph J. Bennett
WO1 James J. Bett
WO1 Joshua R. Blizzard *
LT Patrick Carver
LT Lance A. Cutler
WO1 Jason French
WO1 Thomas P. Gorgeny
CPT WilliamTodd L. Kuebler
WO1 Christopher C. Maxson
CW2 Juan C. Ortiz
LT Edwin F. Rivera, Sr.
WO1 Marshelle L. Santos
LT Gregory J. Walter
CPT Jeremy K. Walters
WO1 Matthew D. Wright

IERW OH-58D/R Track
WO1 Brandon J. Dube **– DG**
LT Joshua Summer **– DG**
WO1 Jay F. Amarillo
LT Mark Cavallo
LT Spencer Gray
WO1 Max C. Jackson
WO1 Sean T. Leaman
LT Nicholas F. Tsamoutales
WO1 William P. Wright

IERW UH-60M Track
LT Brady K. Dearden * **– DG**
LT Richard E. Carter
LT Landon K. Cheben *
LT Michael S. Frank
WO1 Edward J. McDonald
WO1 Michael A. Richardson
LT Taylor J. Roynon
LT Daniel L. Russell

33 Officers, December 15

IERW CH-47F Track
LT Robert E. Turns **– DG**
WO1 Jared T. Alexa
LT William J. Caffery *
WO1 Edward J. Lee
WO1 Zachary A. Mako
LT Clinton Roberts *
LT Matthew P. Soucy

IERW OH-58D/R Track
LT Stefan F. Borden
LT Taylor J. Roynon

IERW UH-60 Track
LT Evan L. Edwards **– DG**
WO1 Yancey J. DeMoe **– HG**
LT Levi L. Lee **– HG**
LT Rorya J. Lipsett * **– HG**
LT Travis S. Fielder
WO1 Michael P. Gemma
WO1 Drue L. Glaze
LT CHrisotpher J. Golab
WO1 Karl G. Kelly
LT Robert C. Knauer
WO1 William McCaskey
WO1 Adriel D. Sauceda
LT Brandon L. Wright
LT Andrew Zapcic

IERW UH-60M Track
LT Eric Sapyta **– DG**
LT Lewis C. Hudson IV **– HG**
WO1 Benjamin J. Dusendang
LT Michael A. Echevarria *
LT John Gordon
LT Thomas M. Hajosch
LT John C. Port
LT Taylor J. Roynon
LT Michael Spears
LT Daniel Varanelli-Diccicco

UAS OPERATOR GRADUATES

AAAA congratulates the following graduates of the Unmanned Aircraft Systems Operator courses, MOS 15W, at Fort Huachuca, Ariz.

Shadow UAS Operator Course
Class: 11-526/530
31 Graduates, November 17, 2011
SPC Peter J. Frank **– HG**
SPC Alan C. Berning
PV2 Joshua D. Carter
PV2 Trevor C. Chase
SPC Daryl R. Cody
SPC Andrew J. Coeville
PFC Emannuel Davila
PV2 Michael A. Eaquinto
PVT Joseph A. Ferretti
SPC Donald T. Haines
SPC Michael A. Hiltwine
PV2 Robert L. Hunt
PFC Elizabeth S. Jenkins
PFC Chad B. Jennings
PFC Jay E. Johnson
PFC Ian M. Kerr
SPC Mikel Lanier
PFC Joseph M. Miller
SPC Jabarri D. Moore
PV2 Jesse R. Nyholm
SPC William J. Paulus
SPC Andres Perez
PFC Raymond F. Popsie
PV2 Robert A. Porter
PFC Whittaker A. Richards
PV2 Christian I. Rivera
SPC Wilberto Ruiz
SPC Christian I. Simons-Rios
PFC John C. Szymanski
PV2 Brett E. Taylor
PFC Ronald J. Violette

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

Legislative Report

COL Curtis J. Herrick (Ret.)
AAAA Representative to The Military Coalition (TMC)

NDAA Passed and Sent To President

On Dec. 8 The Military Coalition sent letters to the leaders of both Houses to be considered by their representatives in the Congressional conference committee, emphasizing our positions on issues in the National Defense Authorization Act and the amendments.

After months of bipartisan work, a threatened presidential veto concerning the imprisonment, handling and trials of terrorist detainees was resolved in the Congressional conference committee via telephone coordination with White House representatives.

On Dec. 15 the House voted 283-136 and the next day the Senate voted 86 - 13, approving the $662 billion fiscal year 2012 NDAA Act for the 50th straight year. The President signed the act on Dec. 31.

Omnibus Passed Just In Time

On Dec. 16 Congress passed the $1 trillion 1,200 page omnibus spending bill for the rest of the 2012 fiscal year accounts averting a midnight government debt ceiling shutdown in accordance with the August Budget Control Act.

The final bill came in at $7 B less than the BCA spending limit that was bypassed by gimmicks such as an $11 B slush fund for disaster relief.

Doc Fix Temporarily Fixed

On Dec. 22, after holding out for a two-year 27 percent medical reimbursement correction of doctors Medicare fees (the Doc Fix), one-year extensions of the partial social security tax relief (from 6.2 to 4.2 percent at about $1,000 a year for many families) and unemployment insurance, and a speedier decision on the Canada to Texas pipeline project; the House relented and passed the Senate's two-month bill. The House received assurances that the Senate would provide conferees promptly in the new year to rehash the interim Senate approach and take action to reduce burdensome and needless reporting requirements being forced on small businesses. The bill was passed on Friday in both houses by unanimous consent and sent to the president for signing.

Government Hiring Veterans

On Dec. 13 the Office of Personnel Management announced that veterans comprised 28.5 percent of total federal government hires in fiscal year 2011, an increase of 2.9 percent over 2010 thereby achieving the highest overall level in 20 years. Per the Dec. Labor Department figures, the unemployment rate for Iraq and Afghanistan era veterans is 11.1 percent.

Guard Support To Mexican Border Being Cut

On Dec. 20 the administration announced that beginning in Jan. the National Guard troops supporting the Customs and Border Patrol along the 2,000 mile border with Mexico were to be reduced from 1,200 to 300 troops. These Guard troops employing OH-48, UH-72 and RC-26 aircraft, budgeted at $60 million, are expected to greatly increase the viewing of the surveillance area during 2012. The rationale included increasing CBP agents from 11,000 in to 2006 to 18,000, the reduction in arrests from 447,731 in 2010 to 327,577 in fiscal year 2011, providing better surveillance and lowering the cost of a program that has cost $1.35 billion since 2006.

BHA Rates Increase

On Dec. 15 the Department of Defense announced that the 2012 Basic Housing Allowance rates will increase an average of 2 percent beginning on Jan. 1. The BHA computation contains the components of median current market rent, average utilities and average renter's insurance. Servicemembers already assigned to an area are protected against individual rate reductions. As an example, a typical E-6 with dependants will receive about $35 more per month in a BHA program that will cost DoD an estimated $20 B during 2012.

Commissaries Survive for 2012

A bill by Senator Tom Coburn (R-OK) to close the commissaries, which sell deeply discounted groceries, and transfer that trade to the base exchanges, which sell at competitive retail prices, did not find its way into the 2012 NDAA.

The notion, which remains active and was proposed to save $1 B a year by 2016, is expected to strongly disadvantage the service customer community and cost the government more because of the loss of funds generated by the current program.

Although the bill offered a $400 annual stipend in return for the savings loss to active duty servicemembers, it does not adequately compensate a family of four that currently saves about $4,400 and the members in the reserve component and retiree communities, who were not included in the assessment.

This transformation is expected to raise exchange prices by at least 7 percent, reduce the benefit to the customers and hazard the amount of dividend funding given to the Morale, Welfare and Recreation Program for use on installations. In this time of funding pressures The Military Coalition will continue to support maintaining the commissary system to benefit the service community and, on full analysis, to prevent a DoD funding loss.

Vet Homelessness Reduction

On Dec. 12 Department of Veterans Affairs Secretary Eric Shinseki reported that the number of homeless veterans had been reduced 12 percent in 2011 from the previous year to keep the VA on track to ending veteran homelessness in 2015. The VA has been working with the Department of Housing and Urban Development and more than 4,000 community agencies across the country. Permanent and supportive homes have been found for more than 35,000 veterans with access to case managers and VA health care. With nearly $60 M appropriated to the VA, the Supportive Services for Families program that was launched on Oct. 1 for homeless prevention and rapid re-housing has been achieving success.

$500 B DoD Sequester Looms

After the failure of the Joint Select Committee on Deficit Reduction in Nov., the Budget Control Act of Aug. 2011 requires a $1.2 T sequester of funds from designated accounts in Jan. 2013. The Defense-designated requirement of $500 B and the at least $450 B cuts underway are considered devastating by Chairman of the House Armed Services Committee Buck McKeon (R-CA) and Secretary of Defense Leon Panetta. While some legislators are seeking delays in the sequester and protecting some programs, the president is demanding that there be no workarounds on meeting the sequester amount. 2012 is going to be a rough legislative year.

Defense Benefits Review On the Horizon

GEN Martin Dempsey, chairman of the Joint Chiefs of Staff, has advised that DoD officials will soon launch a review of the military retirement and benefits systems and that this review may even be commissioned by the president. He went on to say the military must bring those costs under control. Rep. Tim Walz (D-MN) advised in November that troops in the combat zones have mentioned their concerns to him and other members about the widely discussed reductions of military benefits. The TMC supports that such a review be objective, transparent and not be decided by a decision process that does not allow amendments.

In Memoriam

MG Robert S. Frix

U.S. ARMY FILE PHOTO

We are saddened to announce the passing of former AAAA National vice president and Scholarship Foundation Board of Governors president, MG Robert Scott Frix, on Thursday, December 15, 2011 at his home in Sequim, Washington. He was 72.

Born in Harlingen, Texas, he graduated from the United States Military Academy at West Point, New York in 1961 as an Infantry lieutenant.

During his more than 34 years in the U.S. Army as a combat infantryman, Ranger instructor, master parachutist, and dual-rated master aviator he served tours in Vietnam, Operations Desert Shield and Desert Storm, and was deployed to many other nations to include Afghanistan, Kenya, Pakistan, and Somalia.

Among his notable assignments are: Commander, 12th Aviation Group (Combat), U.S. Army Europe, Germany; Assistant Division Commander, 101st Airborne Division (Air Assault), Fort Campbell, KY; Deputy Commanding General, U.S. Army Aviation Center/Assistant Commandant, U.S. Army Aviation School, Fort Rucker, AL; Chief of Staff, U.S. Army Central, Desert Storm, Saudi Arabia; Deputy Commanding General/Chief of Staff, Third U.S. Army, Fort McPherson, GA; and Deputy Commanding General, Sixth U.S. Army, Presidio of San Francisco, CA.

His decorations include the Distinguished Service Medal (with oak leaf cluster), Legion of Merit (OLC), Distinguished Flying Cross, Bronze Star Medal (OLC), Meritorious Service Medal (OLC), Air Medals for valor, and the Army Commendation Medal for valor (OLC).

He retired in June 1995, and was dedicated to several service organizations, including the Army Aviation Association of America, the United Way, the Columbia Basin College Foundation, and especially the Boy Scouts.

He became an Eagle Scout at 17 and volunteered as a Scout Leader for the rest of his life, including service as president of the Blue Mountain Council in southeastern Washington, and is a recipient of the prestigious Silver Beaver and Distinguished Eagle Scout awards. An avid outdoorsman and mountaineer, he loved the Pacific Northwest. Six years ago he suffered a fall and later a stroke; but he continued to laugh and share his love from his wheelchair.

He and his wife, Moe, moved to Sequim in February of 2011, where from his house he admired the mountains he once climbed.

He will forever be remembered for his love, valor, and his devotion to serving his country, his community, and those he loved. He took great pride in the success of his family and the achievements of the Soldiers he mentored. His ready smile and sense of humor will be missed.

May he rest in peace.

Fallen Heroes

AAAA is saddened to announce the recent loss of the following Aviation Soldiers.

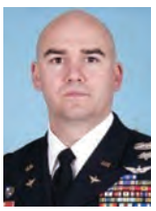
CONUS

The Department of Defense announced on Dec. 14, two OH-58D Kiowa Warriors from 4th Squadron (Attack/Reconnaissance), 6th Cavalry Regiment, 16th Combat Aviation Brigade, crashed sometime after 2000 hours, Dec. 12, inside the southwest training area at Joint Base Lewis-McChord, near Rainier in Thurston County, about 30 miles south of Tacoma killing all 4 pilots.

Killed were:

PRARNG PHOTO

CPT Montgomery



PRARNG PHOTO

CW3 Buoniconti

PRARNG PHOTO

CW2 Satterfield

PRARNG PHOTO

CW2 Sigfrid

CPT Anne Maureen Montgomery, 25,of Grassy Butte, North Dakota
CW3 Frank Alphonse Buoniconti III, 36, of Colorado Springs, Colorado
CW3 Shan Joseph Satterfield, 32, of Anchorage, Alaska
CW2 Lucas Daniel Sigfrid, 32, Zimmerman, Minnesota

Both aircraft were on a night training mission, and the incident is currently being investigated by a team from the Combat Readiness/Safety Center at Fort Rucker, AL.

May they rest in peace.

(Information from Defense Department news releases and other media sources.)

ORDER OF ST. MICHAEL and OUR LADY OF LORETO AWARDS

Air Assault Chapter

U.S. ARMY PHOTO BY SFC STEPHANIE L. CARL, TF THUNDER PAO

MSG Terrence D. Reyes, Jr., operations non-commissioned officer in charge for the 4th Battalion, 101st Aviation Regiment, 159th Combat Aviation Brigade is inducted into the Bronze Honorable Order of Saint Michael by CAB commander, COL Kenneth T. (Todd) Royar, during a Christmas Day ceremony at Forward Operating Base Wolverine, Afghanistan.

Colonial Virginia Chapter

U.S. ARMY PHOTO BY 1SG (RET.) PADRAIG MALONEY

LTC (Ret.) Jack H. Thompson (center), director of the Fort Eustis satellite campus of Embry Riddle Aeronautical University, is inducted into the Bronze Honorable Order of Saint Michael by MG William T. (Tim) Crosby, Army program executive officer for aviation, and LTC (Ret.) Mark S. Jones, Colonial Virginia Chapter president on Nov. 17, 2011 at Joint Base Langley-Eustis, Virginia. Thompson was recognized for his work with Army Aviation professionals for more than 37 years while serving successively as an instructor, assistant center director, center director, assistant dean and regional director for Embry Riddle Aeronautical University.

Mid-Atlantic Chapter

MID-ATLANTIC CHAPTER PHOTO BY MATT COVEY, URS, INC.

Mid-Atlantic Chapter president, LTC (Ret.) Ed Carnes (right), congratulates ***Mr. Frank A. Cansler*** (left) of the Communications Electronics Research, Development, Engineering Center (CERDEC) Flight Detachment, and ***Mr. Karl F. Reinhart***, the director of maintenance for URS Corporation, after inducting them into the Bronze Honorable Order of Saint Michael at Joint Base MacGuire-Dix-Lakehurst, NJ on Nov. 16, 2011. Cansler was recognized on the occasion of his retirement for significant contributions to Army Aviation during his 50 year career in Federal Government service, to include his avionics and antenna engineering expertise involving almost every new aircraft program since the UH-1, OH-6A, OV-1 Mohawk and AH-56A Cheyenne. Reinhart was recognized for his significant contributions to Army Aviation during his 31 year career of aviation support, first as a soldier and then as a Department of Defense contractor supporting the CERDEC Flight Detachment, to include his responsibility for the UH-60 Post Production facility which has been instrumental in the modification and delivery of over 500 UH-60 aircraft.

MID-ATLANTIC CHAPTER COURTESY PHOTO

LTC Jerome T. Clarke, 2nd Battalion, 228th Aviation Regiment, U.S. Army Reserve, was inducted into the Bronze Honorable Order of Saint Michael, at a ceremony Nov. 20th, 2011 by chapter member, COL (Ret.) John J. Gallagher, on behalf of chapter president, LTC (Ret.) Ed Carnes. Clarke was recognized on the occasion of his retirement for his outstanding leadership and advocacy of Army Aviation throughout his 24-year career, including 3 deployments to Iraq, and subsequently being hand-selected to command 2-228th; all while maintaining a demanding full-time civilian career.

Prairie Soldier Chapter

U.S. ARMY PHOTO BY SGT MYRA R. BUSH

LTC Michael R. Ford, former branch chief, Army National Guard Safety and Standardization Branch, was inducted into the Silver Honorable Order of Saint Michael during the opening general session of the annual ARNG Safety and Standardization Conference, Nov. 1, 2011 at the Hilton DoubleTree hotel in Orlando, FL . The induction was conducted by (from the left), LTC Richard A. Gray , state army aviation officer for Nebraska ARNG and president of the Prairie Soldier Chapter; COL Michael E. Bobeck, ARNG Aviation and Safety Division chief, National Guard Bureau; and BG Michael D. Navrkal, Assistant Adjutant General, Army, Nebraska National Guard. Ford was recognized as he prepares to retire for his significant contributions to Army Aviation over a career spanning nearly three decades and a successful string of assignments in which he was able to create and emplace a series of enduring programs on three different continents.

Tennessee Valley Chapter

U.S. ARMY PHOTO BY STEPHANIE JOHNSON

CW4 Patrick Benson was inducted into the Bronze Honorable Order of Saint Michael by COL Robert Marion, senior vice president of the AAAA Tennessee Valley Chapter, during a retirement ceremony Nov. 23 at Redstone Arsenal, AL. Benson was recognized for significant and lasting contributions to Army Aviation over his 20 year career, including three combat deployments, during the last of which he was

awarded the Distinguished Flying Cross for his actions (*see Awards section of this issue*). He has not yet decided where or what he will be doing following retirement.

National

PHOTO BY MR. SCOTT KRAMER, AMATEUR PHOTOGRAPHER

Thomas C. Tsaclas, who performs under the name Tom Stevens, is inducted as a Knight of the Honorable Order of Saint Michael and, with the help of his wife, Petra, accepts a posthumous Bronze Order of Saint Michael on behalf of his father, ***Demetrius***, following his performance on Nov. 5, 2011 at the Suncoast Hotel and Casino Showroom in Las Vegas, NV. COL Kim Labrie (right), state army aviation officer for the Nevada Army National Guard, and CW5 Mark W. Grapin, AAAA National Vice President for Membership, conducted the induction ceremony. Stevens is a Las Vegas tribute artist who has a decades-long history of support to men and women in uniform, and concludes each show with a dedication to these soldiers, sailors, airmen and marines, as well as immediate responders and those who protect our borders. He contributes time and money to veterans' homes, and the "packages from home" program and in visiting and performing for troops at home and overseas. The elder Tsaclas served in the U.S. Army during the Korean War in roles supporting Army Aviation and passed in 2008. As a 16 year-old boy, this Greek immigrant wrote a thesis on the future benefit of in-flight refueling for which Mayor Fiorello LaGuardia of New York awarded him first-place in a "Views of the Future" contest.

NEW MEMBERS

December 2011

Air Assault Chapter
WO1 Nicholas A. Cassin
Mrs. Nicole A Gowdy
SGT Angel L. Jordan
SGT Brian Todd McKinnon
MAJ Brandon Parrish
CPT David B. Rousseau
Aloha Chapter
1LT Jade Allen
1LT John G. Blissard
MAJ Charles R. Boles
SGT Joseph D. Briggs
SGT Collin J. Burrington
WO1 Sean A. Calinawan
SGT Jonathan R. Cherry
CPT Sarah E. Comeau
SFC Michael W. Cooper-Nurse
SFC Gordon K. Davis
SSG Sean R. Downing
SPC Marena Drewright
SPC Richard L. Dupree
SFC Matthew A. Dusch
SGT Louis T. Ecker
CPT Douglas J. Ensminger
SFC Altraig D. Frazier
CPT William P. Gehlen
SGT David M. Goodman
SGM Ronald K. Graves
MAJ Ryan Grippin
CPT Kent R. Hellman
PFC Brandon S. Henry
CW2 Christopher N. Hise
COL Lance Hylander
SPC Arnell James
SPC Michael R. Jay
SPC Jason P. Jeffers
PVT Corey A. Johnson
CPT William G. Katanik
SPC Joshua C. Kiyoshi
1LT Garrett M. Lamarche
SGT Derrick S. Lee
SGT William E. Lyman
CW2 Gary K. Marden
SSG Christopher M. Mayville
SPC Christopher S. Miranda
SPC Nathan A. Nelson
SPC Michael J. Nord
CW2 Kevin M. O'Conner
SSG Paul J. Pearman
PFC Brandon W. Penn
1LT Roman H. Pietris
1SG Johnathan E. Price
PFC Antonio R. Regalado
WO1 Luis S. Robles
1LT Sherry Rose
SSG Jovan A. Salazar
CPT Andrew J. Schlaf
SGT Matthew B. Schmidt
2LT Ryan M. Skowron
CPT Jacob V. Sowell
SGT Justin W. Suina
2LT Aaron J. Trimble
CPT Jennifer E. Valdivia
1SG Jorge H. Valdivia
SPC Allen R. Vanhawten
MAJ Keith S. Vanyo
1SG Tigilau Vaoifi
MAJ Kent Walker
SGT Brandon W. Whitney
SPC Jeremy R. Williams
SPC Joshua J. Young
Arizona Chapter
Paul Meade
WO1 James P. Reed
Mr. Wilson R. Vance
Aviation Center Chapter
WO1 Graciela D. Anderson
WO1 Charles A. Barba
WO1 Timothy A. Beabout
WO1 Randy L. Berndt Jr.
WO1 Robert J. Borden
2LT Stuart L. Brooks
SSG chris bunten
WO1 Richard B. Cardavelli
WO1 Allison S. Deddens
WO1 Anthony S. Dowdell
Casey S. Dunfee
WO1 Travis A. Dusenberry
WO1 Luke S. Gooch
Ms. Shelia Hagler
WO1 Stephen P. Hilgendorf
CW2 Brett N. Horner
WO1 Steven Mathew Howell
WO1 Rommel H. Hurtado
Matthew J. Kukla
WO1 Mickey P. Lansink
2LT Bruce A. Large
WO1 Jerome K. Ledhard
WO1 Sean P. Lennon
WO1 Eric B. Leyh
CW3 John Manfra
WO1 John M. McDonald
WO1 Shawn P. McGrath
WO1 Timothy J. Millard
WO1 Isaac D. Montague
WO1 Austin G. Nelson
David V. O'Connor
WO1 Nicholas J. Pierzchalski
WO1 William R. Pollock
WO1 Deric M. Rasmussen
WO1 Travis J. Robinson
WO1 Joseph K. Schlosbon
WO1 Wyatt L. Sinko
WO1 Joseph S. Smith
WO1 John F. Strasser III
WO1 Jon E. Tracy
WO1 Matthew D. Vennie
WO1 Adrian G. White
WO1 Daniel J. Wiggins
WO1 Francis G. Wootten
WO1 Scot R. Yeanish
WO1 Kyle A. Zimmerman
Big Red One Chapter
SSG Michael Casey Mertz
SGT Keven Parry
Central Florida Chapter
Sean M. Goldenberg
Jeremy S. Lisby
CW4 David Allen Maib
David W. Starr
Taylor G. Test
Colonial Virginia Chapter
Richard H. Cross
Mike Anthony Jenkins
SSG Arnel Paloma Liwanagan
SFC David H. Ware
SSG Sean Christopher Whitlow
Connecticut Chapter
Thomas Matthis
Joseph Pantalone
Jason Verret
Corpus Christi Chapter
Danielle Davenport
David Natividad
Delaware Valley Chapter
CW4 Richard J. Cleary, Ret.
Flying Tigers Chapter
Matthew Wayne Everett
Frontier Army Chapter
MAJ Toby Risner
Greater Atlanta Chapter
WO1 David N. Fields
LTC Jeff Soracco, Ret.
Greater Chicago Chapter
CPT Tae E. Kim
Janine Nyre
Jack H. Dibrell/Alamo Chpt.
Richard A. Young
Jimmy Doolittle Chapter
SSG Guion S. Gregory
SGT Edmund J. Kazmierski
Keystone Chapter
1LT Rory Joseph Lipsett
CW4 Troy A. Zwirblia
MacArthur Chapter
Jason Y. Kim
Mid-Atlantic Chapter
SGT Christopher A. Donovan
SSG Harry P. Falls
SPC Kevin M. Herman Jr.
SGT Sean A. Huynh
Andrew Lin
SGT Aaron B. Saylor
SGT Aaron Alan Schuler
SFC Andrew L. Scott
SGT Samantha A. Sherrill
PFC Jason E. Thomas
Ralph A. Troisio
1SG Peter C. Ward
SPC Frederick Williams
SFC Portia S. Williams
Morning Calm Chapter
CPT Thomas Byrd
CPT Jeffrey Alan Phillipy
PFC Jason K. Rottman

Continued on page 58

NEW MEMBERS Continued from page 57

Mount Rainier Chapter
MAJ John J Kaikkonen
North Country Chapter
CW5 Timothy James French
CPT Wesley Pritchett
North Star Chapter
LTC Jill H. Theiss
North Texas Chapter
Michael Alan Enright
Todd A. Finney
LTC Joanna Gale
Northern Lights Chapter
CW3 Charles L Folk
Old Tucson Chapter
SGT Miguel A. Garcia
Pikes Peak Chapter
WO1 Ron H. Tombre
Prairie Soldier Chapter
SSG Justin Dean McCoy
Ragin' Cajun Chapter
Kaitlin Anselmo
Rising Sun Chapter
CW2 Trailson N. Moore
Ejikeme Aaron Okoro
CW3 Michael E. Parreco
Savannah Chapter
Charles Alan Barrier Sr.
SSG Britten Christopher Christians
CSM Joseph L Depenhart
CPT Claudia L Donahue
CW4 Kenneth W. Evans
1LT Jared Klajnbart
SSG William Tryon
Dwight Ray Ward
Southern California Chapter
Mineo Oyama
Mark E. Walker
Tennessee Valley Chapter
LTC Scott Anderson
LTC Gilbert Boen, Ret.
Terry L. Bradford
Steven E. Fortson
CW5 Robert Jerry Frazier Jr.
Tammy D. Haynes
Tim J. Henstock
Kristina L. Hodnett
David J. Klein
Charles D. Madewell
Doug W. McDaniel Sr.
COL Steve Moeller
MAJ John R. Moran, Ret.
Keith Pendegraft
Charles Brent Phillips
Justin B. Powell
Scott Retzler
John Thomas Sink
John G. Smith
Shezarae D. Washington-Orr
Bryan S. West
MAJ J B Worley III
Michael Allen Young
Thunder Mountain Chapter
SFC Thelton T. Cobb
CW2 Eric Cooper
Utah Chapter
CW5 Gary Wallin
Volunteer Chapter
2LT Billy Joe Blackwell
2LT Richard Allen Bragg Jr.
WO1 James L. King
Washington-Potomac Chapter
LTC Charles R. Barber
WO1 Michael P. Bishop Jr.
Stephen Davis
LTC Glenn E Deetman
Sue Dueitt
CW3 Robert S. Farmer
SGT Amy Fightmaster
SSG Theresa M. Gottsmith
CW5 Daniel R. Jollota
CAPT Terrance G. Jones, USN Ret.
CPT Edwin Neal Reliford Jr.
Robert N. Seigle Jr.
MAJ Ronald White Jr.
David A. York
No Chapter
1LT Matthew Sean Amble
Claude W. Anderson
Daniel Baivey
Andrew Jayron Bidwell
Brad J. Bohan
MAJ Scott Burgess
SFC Thomas Candelario
SFC David M. Cardosa
Ed M. Christensen
SGT Denis J Collado
CW4 Roderick William Combs
WO1 Charles W. Cooper
WO1 Daniel J. Cruz
PFC Dylan J. David
Neville Dawson
Timothy Day
Kavanaugh B. Eldredge
CW3 Charles Michael Fiedler, USAR Ret.
WO1 Daniel J. Fitzner
SPC Aaron D. Floyd
CPT Gilbert J Forgays III, Ret.
SSG Edith Regina Gardner
Manuel Garza
Baruch Golan
SGT James E. Hager
Deborah A. Husby
WO1 Dustin M. Kuhnert
CW5 Arthur M Lawler
WO1 Daniel J. Litscher
WO1 Timothy R. McCauley
SSG Ronald Jay McCormack
Michelle M. Molina
James E. Murguia
Matthew Tyler Nichols
CW3 Greg Price
CW3 Steven G Rice, USAR Ret.
Peter W. Robinson
MAJ Robert Edward Ross Jr.
Stephen Schmidt
CW4 Gregg A. Schroeder
PFC Sierra Sabrina Solomon
WO1 Robert A. Summers
CW2 Brian P. Thacker
J. Bruce Totty

New Members January 2012
Air Assault Chapter
CPT Joshua England
SFC Michael J. Flory
Travis L. Jenkins
CW3 Robert Lamar Moody Jr.
WO1 Derek Douglas Reynolds
CPT Nadia L. Romero
SGT Norman Stanford Smith III
CW4 Edward Paul Walker
Aloha Chapter
CPT Jeffrey Chang
Arizona Chapter
WO1 Steven M Gibson
Karen Peterson
Bryan Charles Steward
Armadillo Chapter
SPC Evan M. Flippo
CW4 Stephen Paul White
Aviation Center Chapter
CW5 Lucas K. Abeln
2LT Joshua William Ahrens
SGM Morris Anderson
CPT Daniel L. Bunn
1SG Tim Clubb, Ret.
MSG Don Goody, Ret.
LTC John Leroy Hamlin, Ret.
2LT Michael John Karolchik
WO1 Colter J. Kautzmann
SFC Jeremy Lindner
CW2 Chris Patrick Miller
WO1 J.D. Nose
WO1 Tyron C. Overton
WO1 Jason Andrew Owens
WO1 Brian A. Piercy
2LT Luke J. Scott
WO1 Jacob C. Viers
WO1 Chris L. Wilson
Bavarian Chapter
MAJ David Barber
Black Knights Chapter
CDT Cale Hansen
Central Florida Chapter
Dan Rini
Connecticut Chapter
LTC Todd Bookless
CPT Angela E. Hubbard
Corpus Christi Chapter
Harry A. Gordon
Manuel Guzman Jr.
James E. Neugent
Kimberly Quiroga
Maria C. Rodarte
Manuel Santos
John Jay Vasquez
Jamie Villanueva
Cowboy Chapter
LTC Stacy L Roth
CW5 Randall Lee Sindelir
Delaware Valley Chapter
Bob Willison
Embry Riddle Eagle Chapter
1LT Denise H. Souza
Flying Tigers Chapter
2LT Jonathan E. Broadbridge
Frontier Army Chapter
SGT Larry Noyvong
CPT Christopher Ruff
Greater Atlanta Chapter
WO1 Christopher N. Briasco
Sam Gentsch
1LT Sarah A. Paul
Griffin Chapter
SPC Douglas Bruce Graham
CPT Egan L. O'Reilly
SFC Charles P. Winchell
Iron Mike Chapter
SFC Eric James Pahon
Jack H. Dibrell/Alamo Chapter
Rudy Flores
Keystone Chapter
LTC David Andrew Doud
1LT David B. Grove
Lindbergh Chapter
Syed Iqbal Ahmad
MacArthur Chapter
SGT John Roderick Varner
Magnolia Chapter
WO1 Dustin M. Aultman
SGT James L. Barksdale
CW4 James C. Barksdale
SGT Jason L. Barksdale
LTC Chip Butler
SSG Gerald C. Fraiser
CW2 Glen A. Henson
SGT James H. Henson
SGM Teddy L. James
SSG Jared L. Patrick
WO1 John M. Strickland
MAJ Franklin E. Tackett
SSG Colton Ward
Mid-Atlantic Chapter
CW5 Daniel Chapman
Midnight Sun Chapter
CW4 Gary Wayne Quarles, Ret.
Minuteman Chapter
SSG Bryan Patrick Miles
Morning Calm Chapter
MAJ Jeff M. Kane
CW2 Daniel J. Laven
SGT Theo C. Nalezynski
CW3 Will O'Donnell
CPT Dorian A. Walton
Mount Rainier Chapter
LTC Heath Joshua Niemi
Narragansett Bay Chapter
CW2 Peter E Schuster
North Country Chapter
CPT Roscoe Damon Brunson, III
CPT Patrick Casey O'Donnell
North Texas Chapter
MAJ Andrew Thomas Carter

Samuel Thomas Hicks III
SSG Timothy Pruitt
CW4 Scott Allen Tucker

Old Tucson Chapter
Michael Hillwig

Oregon Trail Chapter
SPC Travis P. Peters

Phantom Corps Chapter
SPC Rene N. Adamos
SPC Jason C. Alexander
SPC Susana Andrade
SFC Jeffrey P. Bailey
CW2 Eric S. Beckham
PFC Antwonfous R. Bellamy
PFC Jason R. Bradshaw
SPC Jordan M. Bresciani
SFC Gerald Brooking
SSG Bryon J. Conkling
SPC Justin C. Cox
CW2 Jason S. Crane
SPC Brandon C. Cross
SGT Angel L. Cruzvazquez
SPC Nicola R. Currier
2LT Jonathon A. Daniell
SPC James A. Elliott
CW2 Timothy J. Evan
SPC Jeremiah R. Falls
CW2 Christopher K. Fyffe
SSG Patrick J. Gabriel
SPC Steven C. Gibson
SPC Zachary I. Gossard
SGT Joshua A. Grage
CW4 Kenneth Gunter
SPC Randall B. Hatfield
1SG R. Scott Holderman
SPC Greg A. Hooper
SPC James D. Hughett II
CW2 Anthony Jackson
SGT Anthony L. Jackson
CPT Mike J. Jeter
SPC Brian K. Kastl
SPC Crawford E. Keith
CW3 Chad L. Lowery
SSG Corey M. Madden
SFC Donald C. McLeod
SSG Andrew W. McMahon
WO1 Santos Millan
CW3 Troy E. Moseley
CPT Jonathan R. Mulder
CPT Andrew Nadig
CPT Joy F. Nickel
SGT James T. Norwood
SGT Brett T. Nutter
CW3 Esteban O. Orama
MAJ Daniel Russell Ostrowski
1SG Evaristo Parras
1SG Anthony T. Patronas
CW2 Jason D. Penn
SPC Andrew W. Penquite
SSG Kimberly L. Pryor
SGT Gilbert Puente Jr.
SPC Jacob R. Riggs
CW2 Yair A. Rosas
PFC Curtis Michael Rucker
1SG Ruben Samarripa
SGT Travis J. Sanders
CW2 Brandon J. Schmich
SPC Vanessa N. Smith
CW3 Jerry D. Stafford
CW2 Chadwick B. Story
SSG Donald B. Swanerbury
SGT James Chad Swearengin
SFC Michael S. Taylor
SPC Jesse E. Thompson
CW2 Eric B. Thornburg
SSG Eladio Tirado
CW2 Zachary R. Tobin
SSG Francisco D. Toledo
CW4 Santiago Torres
SGT Jimmy G. Trent
SPC Kevin Allen Vogel
1SG Robert L. Wagner
CPT Ryan N. Wallace
SFC Jeffrey M. Walp
CW2 Benjamin N. Westra
CW2 Shea J. White
SPC Jovan W. Willis
SPC Ryan D. Zimmerman

Pikes Peak Chapter
CW2 Jason L. Wunneburger

Prairie Soldier Chapter
1LT Oliver Clay Berglund
WO1 Aaron Carpenter
CW2 Joshua A Schaaf

Rio Grande Chapter
SFC Concepcion Garza Jr.

Rising Sun Chapter
TSgt John S. Dickson
SGT Alexander Legarreta
SFC Scott B. Newhart
SPC Jason L. Nowling
SPC Craig A. Sanchez
SSG John M. Staudacher
CW4 Marshall A. Webb

Savannah Chapter
1LT Allen B. Arant
1LT Ryan Jacob Bahnsen
1SG Rodney Calamese
PFC Gagan Dhiman
CPT Hunter Gray
CW2 Kyle M. Klemm
LTC Jon M. Peterson, Ret.
1SG Jay Curtis Shearer
CW2 Samuel D Slate
1SG John Scott Smith
CW2 Masaki Sudo
CW2 Paul Tucker
CW3 Brent Wayne Welsch

Southern California Chapter
SGT Jimmy L. Calderon
SPC Rudy Rangel

Tarheel Chapter
Eric J. Dean
2LT William T. Harvey

Task Force ODIN
CW4 Miguel A. Diaz Jr.
SSG Mui C. Duong
CW2 Jesse Finkbeiner
SFC Lomack Gray Jr.
CW4 Steven Henslee
SFC Randall L. McCann
CW5 Daniel J. Mordarski
1SG Richard E. Ogden
SFC Shawn A. Perkins
LTC Paul D. Rogers
CW2 William R. Sutherland

Tennessee Valley Chapter
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COL Timothy Baxter
Callie H. Bayless
Phillip D. Brooke
LTC Tracy Brown V, Ret.
Tom Channell
Kevin Fyfe
Jeffrey R. Klabish
COL John R. Leaphart
Doris S Low
CW3 Michael Linard Slocum, Ret.
LTC Timothy Scott Talbot
James Tardif
Kevin Wire

Utah Chapter
CW2 Bradley Young

Volunteer Chapter
Robert Gordon
Rick James Krimmer Jr.
SGT Greg McLean
CW3 Phillip L. Norris
SSG Eric T Radcliff

Washington-Potomac Chapter
SSG Alexander Philip Barge
LTC Ronald W. Burkett II
William P. D'Amico
Scott K. Hayward
Leslie Litten

Wright Brothers Chapter
CW4 William Van Almsick, Ret.

No Chapter
SFC Pascual Vivo Arances Jr. Ret.
CW2 Juan A. Ayala
SPC Shane M. Baker
CPT Jacob Bojarski
SGT Byron L. Burrage
CW2 Antaner Carbajal
SPC Allan B. Caro
John R. Carreon
WO1 Benjamin Lee Conner
SPC Christopher J. Conway
1LT Eloisa A. Cox
CW3 Alan H. Davis
WO1 Jeffry S. Dixon
SGT William D. Ellis
PVT Patrick W. Emory
SGT Jason M. Engel
Christopher M. Fedor
CW2 Tina R. Fornwald, USAR Ret.
ADM William Gallaway
CW2 Norma Garza
SGT David Michael Goodhue
SPC Justin D. Hann
SPC William M. Hansen
CW3 Blake Hardison
CPL Gregory J. Harrison
Thomas C. Hastings Jr.
Eloy Hernandez
CPT Wayne C. Hofmann
SGT Kristopher C. James
1LT Joshua B. Kassel
CW4 John P. Kelliher
SPC David R. Kendall
SPC James-Douglas C. Larson
CW2 Michael A. Loeb
SPC Robert Lopez
Ray Loupenay
SPC Kerry Lynch
SPC Shawn Mara
CPT Troy McCormick
Jon McMillen
WO1 Courtney Miller
SSG Rex A. Mitchell
James L. Perrine
1SG Marvin A. Pinckney
SPC Albert L. Price
CW2 David M. Rierson
SPC Jason P. Rossi
CW2 Kourtney R. Roundtree
PVT Jeffrey D. Rutherford
Lawrence M. Shelton
SGT Adam K. Tate
SPC tyler K. Thomas
SPC Joshua Tylka
SGT Juan D. Valenzuela
SPC Jeremy R.L. Vance
SPC Alexander D. Vargas
PFC Mitchell T. Wilson

LOST MEMBERS

Help us locate a member on this list and AAAA will give you a one month extension to your membership!

Lt. Col. Richard Boyer
Norman Brackett
LTC Robin P. Carrow
CW3 Rodney G. Copple
SSG Andrew B. Coykendall
WO1 Marlene A. DaCosta
WO1 William J. Donahue
Joshua Ellison
SSG Harry P. Falls
CPT Dana S. Fitzpatrick
ADM William Gallaway
SGT Christopher Jackson
SPC Robert Kovalonoks
CPT Sean S. Kwaun
CW2 Curtis A. Major
COL John R. Martin
2LT Brandon E. Nixon
MAJ Michael G. Olmstead
MAJ Brent A. Orr
SFC Christina Pearson
CW4 Troy A. Richardson
SPC Jesse Schmidt
LTC Jerry D. Scott
SFC Andrew W. Silver
MAJ James F. Speelman
CW2 Aaron P Widman
CPT Nathan O. Williams

New Order of St. Michael Recipients

Gold
MG John F. Campbell

Bronze
SFC Christopher Smith
CW3 Frank Bouniconti
CPT Karen Baimbridge
CW3 Anthony Baimbridge
SFC Young Sir
Robert P. Gradle
Scott R. Rudy
CW4 Kurt E. Shultz
CW4 Eric Knieriermen
SFC Robert Brunney
CW4 David Fivecoat
LTC John M. Vannoy
COL William R. Wygal
COL Gregory B. Gonzalez
LTC Tildon K. Allen
Brian Craddock
Caesar Cantu
Timothy Owings
Mark McMillin
Roger Simmons
CW5 Richard Barnard
LTC Thomas C. Kelley III
CW5 Joseph Patrick Shores
Virginia Suzy Young
SSG John Benford
SFC John D. Deetscreek
CW3 Matthew J. Dill
CW5 Charles L. Doyno
1SG Richard D. Gray
CPT William R. Horner
SSG Eric J. Knight Jr.
MAJ Randy Lutz
CW2 Douglas F. Patrick
SFC Bryan L. Shaw
CW3 Allen Jones
CW2 Adam Milliken
CW4 Jeffrey Meierle
Bill Carey
Emede Canales
Joe Guzman
Josie Schmidt
Larry (Lee) Haynes
Leonard Anderson
Rita Burke
Tina Leos
Edwin J. Mickley
Felix S. Tagle
Crecencio Rodriguez
Rodlofo Torrez
MAJ William B. Garber
CW4 Chris Sebastian
CW4 Jessy D. Eisman
CW5 Joseph Patrick Mollahan

New Knight of St. Michael Recipients

LTC Jose L. Aguilar
LTC Michael P. Dietz
COL Christopher Hickey
BG James K. Brown
Mr. Thomas C. Tscaclas
CPT Eddie V. Chew IV

New Lady of Loreto Recipients

Kori Frederick
Jerri Herring
Samantha Avery
Gretchen Jane Levine
Melissa R. Macalintal
Angela M. McLaughlin
Diana D. Ortiz
Sohee Rude
Lori A. Yerdon
Beverly M. Everett
Staci Gordon
Nancy Watson
Patricia Bentley
Sarah Amos
Leslie Kliethermes
Catherine Howe
Lesley Ann Muth
Teresa Tucker
Damaris Sullivan
Amy Wygal
Susan Busch
Fannie Ledger

New Chapter Officers

High Desert Chapter
CPT Michael Server, VP Awards

Rhine Valley Chapter
COL Steven Briggs, Ret., Treasurer

Rising Sun Chapter
SGT Alex Legarreta, VP Membership; SGT Jared Squires, VP Marketing; CW3 Chris Denney, Treasurer

Task Force ODIN Chapter
MAJ Jerry Brennan, President; SFC Ronald Stimpett, Treasurer; 1SG Richard Ogden, VP Membership

Thunder Mountain chapter
Mary Letts, Treasurer

Volunteer Chapter
CW4 John S. McConnell, VP Membership

Winged Warriors Chapter
CPT Michael Crivello, Senior Vice President; 1LT Eric Rathbun, Treasurer

ACES

MAJ Jerry Brennan
Task Force ODIN
CW4 David R. Draper
Rising Sun Chapter

LTC William H. Huff, IV
Phantom Corps Chapter

LTC William W. Merrell
Magnolia Chapter

Soldier of the Month

PFC Jason K. Rottman
October 2011
Morning Calm Chapter

SGT Miguel A. Garcia
November 2011
Old Tucson Chapter

New Lifetime Members

MSG Don Goody, Ret.
SSG Kenneth Alan Kendrick
LTC H. Kent Russ, Ret.
LTC Patrick J. Sheahan, Ret.
LTC Timothy Scott Talbot

New Industry Members

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Avionic Instruments
Lynux Works, Inc.Quadrant Simulation Systems Inc.
RSI Visual Systems, Inc.
Trailer Transit Inc.

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UPCOMING EVENTS

FEBRUARY 2012

Feb 8-9 **Joseph P. Cribbins Aviation Product Symposium,** Huntsville, AL
Feb 11-14 **HAI Heli-Expo**, Dallas TX
Feb 22-24 **AUSA Winter Symposium**, Fort Lauderdale, FL

APRIL 2012

Apr 1-4 **AAAA Annual Professional Forum and Exposition,** Nashville, TN

MAY 2012

May 1-3 **AHS 68th Annual Forum & Technology Display**, Fort Worth, TX

JULY 2012

July 20 **AAAA SFI Executive Committee (Conference Call) Meeting,** Arlington, VA
July 21 **AAAA Scholarship Selection Committee Meeting,** Arlington, VA

AUGUST 2012

July 31-Aug 5 **VHPA 29th National Annual Reunion,** New Orleans, LA

ARMY AVIATION ASSOCIATION OF AMERICA

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PURPOSE: To maintain organizational records. Used by national, region, and chapter officers, office staff and members (when approved) to generate mailing lists,chapter and region rosters, etc. Failure to furnish information may result in members not receiving the Monthly Magazine, ballots, letters and other correspondence of importance to the membership. Incorrect information may result in erroneous computation of statistical & financial reports and/or credit for prior membership.

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Address Date Birth (mmddyyyy)

City State ZIP+4 Home Tel

Unit of Assignment Work Tel * (*DSN for OCONUS work phones otherwise commercial)

Spouse (First Name) FAX Tel:

E-Mail Addresses *
(*AKO – us.army.mil preferred)(If both military and civilian are used, place preferred one first)

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☐ Associate (all others) *AGR please check ARNG or USAR ☐ Male ☐ Female

CERTIFICATIONS Place "X" in appropriate box

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☐ I HAVE HELD a Warrant issued to me by the Secretary of the Army (If NO check Associate above)
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Simultaneous Membership Form 600-DS (Fill-in) (Revised JAN 2011)

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 Alberston 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

JANUARY 1987

Wide Field-of-View, HMD

Adjoining photo depicts the Hamilton Standard Helmet Mounted Display (HMD)—shown here at the Sikorsky Aircraft fixed base simulator. Head gear mounts a pair of one-inch CRTs which forward high resolution video data to two precision optic devices in front of the pilot's eyes. The pilot's field-of-view is 60 degrees vertical and 120 degrees horizontal.

Next Generation of Proletarian Tank-Busters

Adjoining photo offers the Mil Mi-28 all-weather attack helicopter. The Havoc (NATO codename) is a two-seat tank-buster, a Soviet reply to the AH-64 Apache. Like its older stable mate, the Mi-24 Hind, the Havoc is armored to withstand 12.7mm bullets and 20mm shell fragments.


THE THREAT — The Mi-28 HAVOC is a new-generation Soviet attack helicopter. Working with the HIND in air-to-air roles, it will be operational in the late 1980s.

The Soviet penchant for armored tank-busting aircraft harkens back to the IL-2 *Shturmovik* of Eastern Front fame, arguably the best aircraft of its type produced during the Second World War. Dubbed the "Flying Tank" for its robust construction (known to German infantrymen as the *Schwarz Tod*—"Black Death"), the IL-2 could absorb 20mm hits like a pill-popping hypochondriac. The *Shturmovik* went on to become the most produced combat plane in history at 36,163 copies.

In Case You're Keeping Score . . .

The constituency of the Army Aviation Hall of Fame, by rank or grade: Generals: 2; CW4s: 4; LTGs: 4; CW3s: 1; MGs: 4; CW2s: 3; BGs: 2; CSMs: 1: Colonels:14 ; SFCs: 1; LTCs: 3; DACs: 1; Majors: 6; Civilians: 6

50 Years Ago

JANUARY 1962

Salvage Mission

Wyoming helicopter pilot, Joe Green, found a downed airplane in the Trout Creek Basin. The enterprising pilot and his mechanic took the plane apart, removing it from the trees. Green flew two trips removing the derelict. Adjoining photo shows Green lifting off with the wings from the wreck lashed to the sides of his Hiller 12E, creating the impression of a rotary-wing with skirt armor.

Hubba-Hubba!

On December 7, CPT J.N. Nichols and PFC Lyle E. Stone lifted off from the Bell Helicopter plant in Hurst, Texas.The aviators were manning a U.S. Army HU-1B, bound for Mobile, AL. Normal flight time is six to seven hours, including a fuel stop at Alexandria, LA. Nichols and Stone completed the 587-mile flight in four hours and 28 minutes, averaging 130.7 mph. Both flyers are assigned to the Army Medical Aviation Detachment at Fort Sam Houston, TX.

"Tactics"

LTG Hamilton H. Howze, commanding general, XVIII ABN Corps and Fort Bragg, is shown speaking to members of the 82nd ABN Division chapter during a recent dinner meeting at Fort Bragg, NC. The enlightened practitioner of mobile warfare outlined new aspects for Army Aviation, such as broadening the tactical branch's contribution to the battlefield through training and new tactics. In a matter of months, General Howze would chair the Tactical Mobility Requirements Board, better known as the Howze Board.

Army Aviation Hall of Fame

The Army Aviation Hall of Fame sponsored by the Army Aviation Association of America, Inc., recognizes those individuals who have made an outstanding contribution to Army aviation. The actual Hall of Fame is located in the Army Aviation Museum, Fort Rucker, Ala., 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.

Contact the AAAA National Office for details at (203) 268-2450.

Chief Warrant Officer 5 Stephen T. Knowles II, Ret.

Army Aviation Hall of Fame 2007 Induction

Retired CW5 Stephen T. Knowles II completed flight school in 1970 and was assigned as an UH-1C pilot, armament officer and fire team leader with the 48th Assault Helicopter Company in the Republic of Vietnam, where he participated in the famous incursion into Laos in Operation LAM SON 719.

At Fort Hood, Texas, as the standardization instructor pilot (SIP) with Troop A, 7th Sqdn., 17th Cav. Regt. of the 6th Cav. Brigade, Knowles was instrumental in the development of Joint Air Attack Team doctrine.

During a break in service, Knowles worked as a TH-55A primary flight instructor with Doss Aviation at Fort Rucker while pursuing his Bachelor of Applied Science Degree in Operations Management from Troy State University, graduating Cum Laude.

He rejoined the Army serving as an SIP with the 1st Bn., 14th Avn. Regt. and then with the Directorate of Evaluation and Standardization at the U.S. Army Aviation Center, and deployed to combat as an SIP during Operations Desert Shield and Desert Storm.

A great warfighter who always led from the front, Knowles was selected as the first Chief Warrant Officer of the Aviation Branch in 2003, taking the guidon and moving the branch warrant officers into the 21st Century.

He established the charter for the CWOAB, which delineated the duties and responsibilities for both the CWOAB and for the CWO of the Army Aviation Center. As the CWOAB, he worked to revise and improve the Aviation Warrant Officer Intermediate and Advanced courses and provided numerous briefings and presentations on WO issues, policies and programs to senior leaders in the Pre-command and Division Commander's courses, and to senior Army officials.

A master Army aviator, Knowles accrued over 5,550 flight hours with 846 combat flight hours during his cumulative 28-year career.

Among his numerous military awards and decorations are the Distinguished Flying Cross, the Legion of Merit, the Bronze Star, three Meritorious Service Medals, 28 Air Medals including two for Valor, the Vietnam Cross of Gallantry with Gold Star, and the Broken Wing Award.

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