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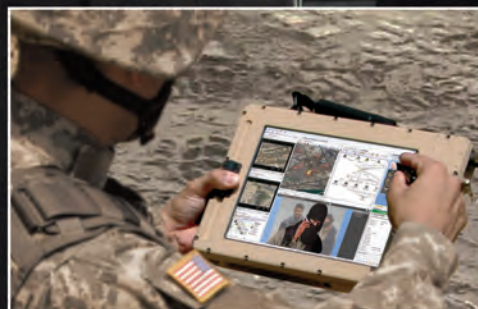
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OVERWATCH





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ON THE COVER

PAID ADVERTISEMENT: ABOUT THE COVER – An innovative and technologically advanced derivative of the combat-proven Predator® unmanned aircraft system (UAS), the U.S. Army's MQ-1C Gray Eagle UAS was designed by General Atomics Aeronautical Systems, Inc. to provide the Army and Division Corps commanders with a long-range, armed, unmanned aircraft surveillance and attack capability. Featuring a heavy-fuel engine, triple redundant avionics, and redundant flight controls/surfaces, Gray Eagle can fly for more than 30 hours and carry four Hellfire missiles. An earlier Block 0 version of the contracted Block 1 aircraft was fielded nearly two years ahead of Army requirements to meet urgent combat needs, and Block 1 aircraft have been deployed early as well. Both versions have contributed significantly to defeating terrorists and saving soldiers' lives. *Caption provided by the advertiser.*

Briefings...

LATE-BREAKING NEWS ANNOUNCEMENTS NOTES

McNair Receives Abrams Medal

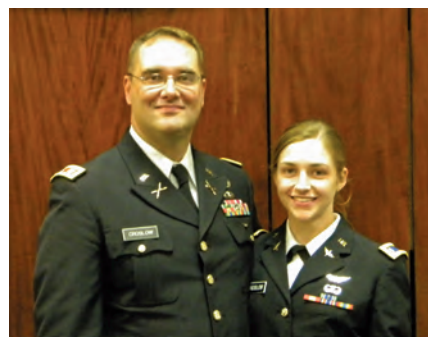


MG (Ret.) Carl H. McNair, Jr. received the Association of the United States Army GEN Creighton W. Abrams Medal for outstanding service to America's Army at the opening ceremony of the AUSA Annual Meeting and Exposition, Oct. 25, in Washington, D.C. The presentation was made by AUSA President, GEN (Ret.) Gordon R. Sullivan (right) and Vice President, LTG (Ret.) Roger G. Thompson. An inductee in the Army Aviation Hall of Fame, McNair spent four decades serving to enhance the posture of Army aviation on the battlefield. He became the first chief of the Army Aviation Branch when it was established on April 12, 1983; prior to that, he was commanding general of the U.S. Army Aviation Center and commanded the Aviation Brigade at Fort Rucker, AL; ultimately accumulating more than 4,000 flight hours including 1,500 in combat. He has been a leader with AUSA and AAAA over the past 30 years, to include serving as both National president of AAAA and the AAAA Scholarship Foundation.

AUSA COURTESY PHOTO

(SOF) around the globe from the program headquarters at the Special Operations Forces Support Activity in Lexington, KY.

Croslow Named Distinguished Graduate



U.S. ARMY COURTESY PHOTO

The lieutenant selected by the Army Aviation Branch chief to represent all young women in Army Aviation today during the AAAA 2009 annual convention program earned her wings and recognition as the distinguished honor graduate. 1LT Jennifer M. Croslow graduated from the U.S. Army Aviation Center of Excellence initial entry rotary wing OH-58 track on Oct. 27, 2010; her husband, CPT Billy G. Croslow, pinned on her silver wings. She was one of the group of female Army Aviators, including Sally Murphy, the first woman Army Aviator, and legacy Women Air Service Pilots (WASPs) from WWII who were recognized during the 35th Anniversary of Women in Army Aviation celebration in Nashville, TN. Her initial assignment will be with the 25th Combat Aviation Brigade at Wheeler Army Airfield, HI.

CORRECTIONS:

In the October issue on page 4 in the "On The Cover" box the aircraft depicted is an MH-60; on page 10, CW5 Reese's name is misspelled in the column by-line; the description of the outbound track in the graphic on page 54 should read 2500' MSL; and on page 61, the caption should read COL Wheelock is a 1983 graduate of West Point. Our apologies to all.



LOCKHEED MARTIN COURTESY PHOTO

Yellen Named VP

AAAA National Executive Board member and current AAAA National Secretary, BG (Ret.) Howard Yellen was named by Lockheed Martin on Oct. 12, 2010 as Vice President of Special Operations Support Contractor Logistics Support Services (SOF CLSS). Yellen served 34 years in the U.S. Army, including command of the 160th Special Operations Aviation Regiment (Airborne), and culminating as the deputy commanding general, U.S. Army Special Operations Command. He will be responsible for spearheading Lockheed Martin's logistics support to U.S. Special Operations Forces

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AAAA President's Cockpit



Hero Honored, New Convention Branding

October was a very busy month for the Association, starting with the 8th Annual Luther Jones Aviation Summit at Corpus Christi, TX. Hosting this event for the first time, I believe Quad-A delivered a great success with record attendance, the largest volume of exhibit support from our Industry Members, and great speakers including Mayor Adame and Congressman Ortiz.

A special thank you is owed to the CCAD leadership team led by their commander COL Chris Carlile.

Following on the heels of the Summit was the AAAA Scholarship Board and AAAA National Executive Board meetings. This was another record setting year for scholarship awards with 186 awards totaling more than \$295K. Our Scholarship Foundation members and those who raised funds deserve a loud "hooah" from each of us.

During the luncheon preceding our NEB meeting, Mrs. Libby Kinnard, wife of the late Army Aviation and Screaming Eagle legend LTG Harry W. O. Kinnard, joined us as we paid tribute to her husband in the awarding of the first annual LTG Harry Kinnard Washington Potomac Chapter Scholarship.

AAAA Washington Potomac Chapter President, MG Rudy Ostovich, Ret., and Scholarship Foundation Vice President, COL Tom Harrison, Ret., joined Mrs. Kinnard for the reading of a thank you letter from the first recipient, Ms. Kelsey Hamilton.

This year's AUSA was especially meaningful for the McNair Family.

MG (Ret.) Carl McNair, AAAA and Scholarship Past President and member of the Army Aviation Hall of Fame was presented with the first AUSA GEN Creighton Abrams award during the opening ceremonies for a life time of support to the Army in and out of uniform.



Mrs. Libby Kinnard, wife of the late Army Aviation and Screaming Eagle legend LTG Harry W. O. Kinnard, stands with, from the left, AAAA Washington Potomac Chapter President, MG (Ret.) Rudy Ostovich, MG (Ret.) Carl McNair and Scholarship Foundation Vice President, COL (Ret.) Tom Harrison, for the reading of a thank you letter from the first recipient of the chapter's Harry W.O. Kinnard memorial scholarship, at the National Executive Board luncheon in the Washington D.C. Convention center, Oct. 25.

To Carl, on behalf of the Association, thank you for your never-ending support to our Army.

It is with deep regret that I must report that another of our true icons has passed on to "Fiddler's Green."

COL John J. Stanko, the Father of U.S. Army National Guard Aviation and whose military career reached all the way back to WWII flying B-24s, passed away on 8 October.

To honor John, the AAAA National Board approved a recommendation to name the National Guard Army Aviation Unit of the Year Award which is presented each year at the AAAA Annual Professional Forum and Exposition in his memory. John was a longstanding National Secretary/Treasurer of the AAAA and member of the Army Aviation Hall of Fame. It would be hard to overestimate the impact John had on Guard

Aviation. He will be sorely missed but remembered in perpetuity by the naming of this award.

Finally, I would like to point out a new convention title if you did not notice in the paragraph above.

The AAAA Annual Convention will now be known as the **AAAA Annual Professional Forum and Exposition** in order to better capture the professional nature of this event. Registration information will be available in the upcoming December issue.

I hope to see you in December at the UAS meeting in Washington, DC and especially in April at the 2011 AAAA Annual Professional Forum and Exposition in Nashville, TN.

My door is always open!



BG Rod Wolfe, Ret., President
rod.wolfe@quad-a.org

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From The Aviation Branch Chief



Providing the Best UAS Capabilities for Full Spectrum Operations

By BG Anthony G. Crutchfield

In the past decade our Army has been a world leader in the development and employment of military unmanned aircraft systems (UAS) as a combat multiplier.

These aerial systems provide the tactical ground commander with an invaluable capability for intelligence, surveillance, reconnaissance and target acquisition in order to search, find, fix and exploit or destroy enemy forces across the battle space.

The U.S. Army Aviation Center of Excellence (USAACE) has an important mission in working the full spectrum of issues associated with the UAS community of practice in order to provide resilient and adaptive unmanned systems capabilities for the future security environment.

Many of our directorates and subcommands are actively involved in all aspects of issues related to doctrine, organization, training, maintenance, logistics, personnel and facilities process (DOTMLPF).

Here is a sampling of some of the USAACE's efforts.

Synchronizing Army UAS Issues

Since the release of the Army's first UAS Roadmap (the Army's strategic vision for UAS employment) this past April, USAACE continues its efforts to provide the synergy and synchronization to the UAS community of practice.

The Aviation CoE leads the monthly Board of Directors action group meetings that bring the key players together to work a range of DOTMLPF issues within the Army and joint community.

Currently, the CoE is focused on collecting comments and feedback on the UAS Roadmap from across the Army and the Defense Department; and from other government agencies, industry and academia.



Sgt. Michael Arons (left) and Staff Sgt. Eric Wheeler, Unmanned Aircraft System Training Battalion, Company C, inspect a Hellfire simulation training missile on a Gray Eagle UAS.

Part of this action is also working experimentation and the validation of Roadmap concepts with our Air Maneuver Battle Lab here at Fort Rucker, Ala. By mid-2011 they will be drafting the next edition of the Roadmap, which has an April 2012 target release date.

Other actions working in fiscal year 2011 is the optionally piloted vehicle (OPV) study in conjunction with the Army G3 staff and working on the cargo UAS capability assessment with the Sustainment Center of Excellence.

They will also continue to work Army related issues concerning UAS facilities and integration into the National Airspace System with the Army and Defense Department Integration Process Teams.

Leading UAS Training

Our UAS Training Battalion (UASTB), a subcommand of the 1st Avn. Bde., is responsible for providing world-class qualification training for Soldiers in 15E and 15W military occupational skill (MOS) career fields at Fort Huachuca, Ariz.

The UASTB consists of a cadre of over 700 Soldiers, Department of the Army civilians and contractors, and is charged with providing UAS operators, maintainers and leaders in support of the War on Terrorism and all Marine Corp Shadow Operators and Maintainers.

During fiscal year 2010, the UASTB trained approximately 2,039 students as operators and maintainers, and as warrant officer technicians, within 21 separate programs of



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instruction. This number represents the 8th consecutive annual student throughput increase.

The UASTB continues to exceed all mission requirements, despite the challenge of having provided over 37 Soldiers from their ranks in support of deployments for Task Force ODIN and to the Quick Reaction Capability companies.

In addition to training active Army and National Guard Soldiers, the UASTB continues to train Shadow operators for the Navy and Marine Corps.

For information on the Army UAS Roadmap visit online at: www.rucker.army.mil/usaace/uas/ or call (334) 255-0882, DSN: 558-0882.

Training the 15E Maintainer

The creation of 15E Unmanned Aircraft System Repairer MOS was solidified this year with the May 17 initiation of the first 15E advanced individual training at Fort Huachuca.

This initial entry training course, focused on the RQ-7 Shadow system, reduces overall training by 19 weeks and provides a common maintenance skill set to all UAS repairers.

Recently, this first class graduated 21 qualified repairers on Sept. 24.

The graduates will be the first Soldiers to spend their entire careers specializing in UAS maintenance, allowing them to develop specific maintenance knowledge and preparing them to maintain current, developing and future systems.

Their reduced time in AIT will also enable the Army to fill this critically short position faster in support of the Army Force Generation cycle.

Another significant milestone occurred June 21 with the start of the first MQ-1C Gray Eagle maintenance course with a class of 16 Soldiers.

This 15-week course prepares Soldiers, qualified on the Shadow, to transition to maintaining the Army's newest UAS being fielded to the first unit in 2011.

The initiation of the training at UASTB in support of first unit manning is a result of a team commitment between the program office and

USAACE to develop professional, well-trained Soldiers for this key addition to the Army.

The MQ-1C Gray Eagle is the most sophisticated UAS fielded to date and will significantly improve support to commanders and troops on the ground.

DES Support to the Field

Our Directorate of Evaluation and Standardization (DES) serves as proponent agent for the Army Aviation Standardization Program for UAS.

Their UAS Branch executes training, assessments and evaluations for Army UAS units worldwide in order to achieve standardization in both individual and collective flight training, which all leads to enhanced combat readiness.

In July, DES completed a Rapid Action Revision to Army Regulation 95-23 "Unmanned Aircraft System Flight Regulations," originally published Aug. 7, 2006.

The revision, dated July 2, 2010, addresses issues and lessons learned from combat operations and the fielding of new equipment.

Some of the highlights include: authorizing warrant officers to perform payload operator duties on a limited basis, lists new authorized duty symbols for logging flying time, redefines the mission approval process, establishes currency requirements in accordance with the appropriate aircrew training manual, and many other updates.

Copies of AR 95-23 can be downloaded from the Army Publishing Directorate website at: www.army.mil/usapa/epubs/pdf/r95_23.pdf.

They have also assisted the Directorate of Training and Doctrine in the rewrite of Training Circular 1-600 "Unmanned Aircraft System Commander's Guide and Aircrew Training Manual."

Most recently, they have worked with the Army Aeromedical Activity on the flight physical requirements for UAS operators, helping to provide clarifications to commanders and medical personnel in the field.

During FY10, the UAS Branch conducted 20 assistance visits, 40 flight evaluations, and administered 120 written, and numerous oral and no-notice evaluations; and also produced 20 new UAS instructor operators.

In addition, they helped the

Defense Contract Management Agency on AR 95-20 "Contractor's Flight and Ground Operations," which addresses requirements for contractor UAS operators; and worked with various government flight representatives from different regions on contractor operator training and qualifications, designations, assignments, and medical requirements.

Capturing Lessons Learned and TTP

Throughout operations in Iraq and Afghanistan, USAACE has actively collected the lessons learned – along with the multitude of evolving tactics, techniques and procedures being developed, refined and implemented – from our aviation formations and warfighting partners.

The Directorate of Training and Doctrine recently participated in the final review with the Air Land Sea Application Center, a joint office, on the revision of the publication "Multi-Service Tactics, Techniques, and Procedures for the Tactical Employment of Unmanned Aircraft Systems," which was first published in August 2006.

This joint publication is known as Field Manual 3-04.15 within the Army publications system and the latest version of this manual is scheduled for release in November.

Closing Thoughts

Army UAS will continue to play a key role in building the aerial layer network, enabling better communications and data sharing immediately out horizontally across the battlefield for commanders and Soldiers at all levels.

The goal is to transition to network centric operations while on the move, which is critical to expanding the depth of information and situational awareness at all echelons within our joint and unilateral operations.

The USAACE team takes great pride in leading the effort to train quality UAS operators and maintainers in order to fill this critical battlefield capability.

Above the Best!

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



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Chief Warrant Officer of the Branch Update



Selection for Promotion

By CW5 Michael L. Reese

MILPER message 10-267 announcing promotion zones of consideration for active duty warrant officers was recently released. The message identifies those CW2s, CW3s, and CW4s eligible in the primary and above the zones, and only certain year group officers will compete for CW5 below the zone.

The message also details requirements for Officer Evaluation Reports (OER's), digital photos, and electronic certification process of your board file.

Maintaining Your File – Your Responsibility

Ideally the announcement is not a surprise for those eligible officers and the next few months are not spent scrambling in an attempt to get your file prepared. Maintaining your file should be a continuous process that requires periodic attention and review by the officer.

Your file is a chronological culmination of your career which a promotion board member spends only minutes to review you for promotion.

At a minimum the officer should review his/her file annually or anytime there is a change/ addition such as, but not limited to: OER, permanent change of station (PCS), temporary change of station (TCS), and awards.

This year's promotion rates are expected to be very competitive for CW3, CW4, and CW5. The trend of lower promotion rates will likely be the norm for the foreseeable future.

SELCON Now Applies to CW5 Non-Selects

It must be noted that selective continuation (SELCON) may be considered for non-select CW2, CW3, and CW4. New this year is the addition of CW5; previously, non-select CW5s were authorized to continue their ser-



CW5 Lance McElhiney, from Harker Heights, Texas, the chief command warrant officer, 4th Combat Aviation Brigade, 4th Infantry Division, Multi-National Division-Baghdad, briefs senior warrant officers from the CAB and the 1st Air Cavalry Brigade, 1st Cavalry Division, about their duty to mentor younger warrant officers during a meeting on the airfield at Camp Taji, Iraq, May 24.

vice until 30 years of active warrant officer service and be considered for future selection boards.

This year CW2s, CW3s, and CW4s who are two time non-selects may be offered SELCON in their present grade based upon the needs of the Army. If selected for SELCON, officers will be offered a three year continuation; if not selected, the officer will be separated or retired.

Actions Just Prior to a Board

Prior to the convening of the 19 January 2011 promotion board a few fundamental tasks should be addressed by the eligible officer.

Thoroughly review your Official Military Personnel File (OMPF) and your Officer Record Brief (ORB).

These web-based personnel databases should accurately represent your military career; often officers are not accurately represented due to

missing or incomplete documents.

The onus is on the officer to ensure all of the data is correct by which he/she signifies to the board by certifying electronically through the "My Board File".

The OMPF and ORB should not only be looked at individually for correctness but should support one another for documentation of (but not limited to): OERs, awards, orders, assignments, civilian education and professional military education (PME).

The ORB presents the board with the macro look and the OMPF provides the micro details about the officer. For instance, the ORB displays all of the awards earned and the OMPF contains the documentation of each award.

An award displayed on the ORB or photo must be supported in the OMPF; a discrepancy especially for a valorous or significant award can raise concerns during the boarding process.

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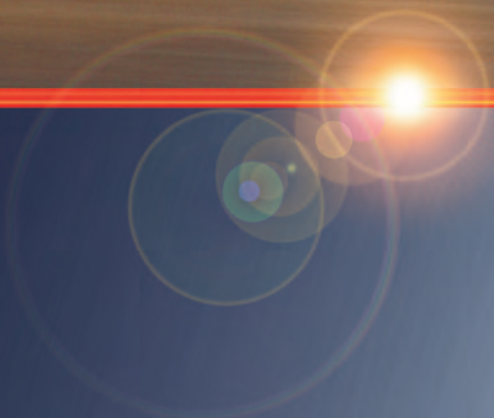
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If the officer chooses not to review and acknowledge the correctness of his/her file the board may view this as a negative. If the soldier does not care enough to validate his file, why should the board member care?

Recognizing Potential

Junior officers and future CW3s and CW4s must understand that promotions are designed to reward past performances and to recognize potential for increased responsibilities.

This might sound cliché but there is a significant amount of truth of those words routinely spoken.

When a young pilot arrives to a unit his/her number one priority is to progress to readiness level 1 and be the best RL1 pilot in the unit.

The next goal is to attain pilot in command status as rapidly as his/her abilities allow; where the commander

and standardization pilot will use three factors to determine when the pilot is ready – proficiency, maturity, and judgment.

Proficiency is relatively easy to gauge since we have aircrew training manuals that specify task, conditions, and standards that make proficiency quantifiable.

Judgment and maturity may not be as easy to quantify and what often highlights an officer’s qualities are his/her abilities to perform demanding additional duties.

Just as the officer strives to be the best tactical/technical pilot, he should strive to be the best additional duty performing officer in the unit.

Career-Long Goal

This goal minded characteristic should be carried out through the warrant officer career.

After attaining a special qualifying identifier (tracked) the officer should incrementally continue to improve and seek higher responsibilities.

An instructor pilot should strive to attend the Flight Examiner Course then attain Standardization Pilot status in the company and seek battalion

level positions when rank and experience permits. Not only are these jobs personally rewarding they are most always recognized.

Again, promotion rates are predicted to be highly competitive for some time and we need to ensure that we are retaining the most competent and qualified officers who possess the most potential.

The tools available and support available through the Human Resource Center have significantly eased the burden of the soldier when managing his/her file.

Ensure your file is managed properly by occasionally reviewing the data throughout the year, don’t wait until promotion time.

When in the zone for consideration for promotion, validate your file so it is representative of your career.

“ABOVE THE BEST”



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.



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Command Sergeant Major Update



Transforming Air Traffic Services

By CSM Tod L. Glidewell, COL James R. Macklin Jr., CSM Homer L. Kennedy and CSM Ronaldo N. Ronsairo

Transformation has reached almost every corner of Army Aviation and with it two of our smallest brigade size elements have transformed to meet big challenges.

The Air Traffic Services Command (ATSCOM) and the 164th Theater Aviation Operation Group (TAOG) stationed at Ft. Rucker are evolving to meet the demands of the current mission theater while still providing traditional services at home station. This month I have asked the commander, COL James Macklin and his two command sergeants major, CSM Lee Kennedy (ATSCOM) and CSM Ron Ronsairo (164th TAOG) to provide a look at how these two organizations are making a big difference.

ATSCOM and the 164th TAOG are fully engaged supporting both full spectrum operations and fixed base aviation facilities globally.

These two Forces Command (FORSCOM) organizations work jointly with multiple governmental agencies within DoD, to provide the field with highly trained air traffic services (ATS) personnel that perform command and control, standardization/certification, and provide technical expertise and ATS oversight.

From flight checking fixed base NAVAIDS on installations worldwide to providing command and control of airfield operating battalions (AOB) in theater, these two commands are vital to Army Aviation.

The TAOGs

Today, there are only two TAOGs in the Army; the 164th in the Active Component and the 204th in the Army National Guard.

The TAOG's operational level focus is assisting commanders at multiple levels through standardization and technical expertise for Army air traffic services in



A U.S. Air Force MC-130 Combat Talon aircraft was destroyed Dec. 30, 2004 when it landed on a runway at an Army airfield and encountered a 30-by-30 foot hole in the pavement which was created by ongoing repair operations.

the joint, interagency, intergovernmental, and multinational environment. One TAOG is always deployed in support of Operation New Dawn (OND) and Operation Enduring Freedom (OEF).

These organizations shape the development of Army and Joint use airfields, continuous evaluation of military and host nation Air Traffic Services requirements, coordination of evolving airspace and ATS equipment sustainment in support of CAB commanders and Army senior airfield authorities' needs and the theater commander's priorities.

Currently, Air Traffic Services Standardization Elements (ATSSE) of the 164th TAOG are found working within the CJ3 Air staff of United States Forces Iraq (USF-I) and United States

Forces Afghanistan (USFOR-A).

Additionally, a 164th TAOG logistics and organizational ATS repair activity is postured in Kuwait to support both OND and OEF TAOG and CAB ATS unit support requirements.

At the tactical level, the TAOG employs its organic AOBs to perform senior airfield authority and air traffic control tower, airspace information center and radar services at airfields assigned to it by the theater commander.

Together, the TAOG and AOB are a force multiplier to Army Aviation.

Providing Strategic Support

Focusing at the strategic level is ATSCOM which provides airspace, ATS support and expertise to Army Warfighters, commands and installations worldwide.

FORSCOM ARMS inspection of ATS and maintenance activities, flight checks of NAVAIDS, assistance visits, ATS certifications of both controllers and maintainers, training readiness oversight (TRO) of Title 10 National Guard personnel in conjunction with 1st Army as well as oversight and assistance with ATS Reset are all critical components of the ATSCOM mission.

The role ATSCOM plays spans across assistance to major combat operations, SME's supporting installations, commands and warfighters and an ATS quality assurance program that keeps worldwide ATS operations standardized.

This strategic organization routinely interfaces with multiple governmental and DOD agencies ensuring that Army airspace and ATS requirements in joint and combined environments and national and international airspace are sufficient and safe.

In concert with the aforementioned roles of ATSCOM, it was noted that there were deficiencies in the ability to effectively manage airfields, specifi-

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ASK THE BRANCH CSM



SGT Shelby Boaz,
1st Combat Aviation
Brigade,
Camp Taji, Iraq

Q: CSM, I was wondering if anyone would be able to help me get some clarification on my brigade's history. We are beginning to think that our unit history was just sort of tossed together. Any help would be greatly appreciated.

CSM: SGT Boaz, your brigade is not alone. In fact it seems Army Aviation has been transforming steadily since the Vietnam era and as a result we have lost or have little information concerning lineage and honors.

What information that does exist in many of our units often is not considered part of the unit history in eyes of The Institute of Heraldry (TIOH) or the Center for Military History (CMH).

Your Brigade has two prime examples; 2-101st and the 127th ASB helped form your brigade and were reflagged to 1-1st Avn. Regt. and 601st ASB.

In the eyes of TIOH and CMH, 2-101st and 127th history ended the day of the reflagging unless reactivated at a later date. Although Soldiers may see them as part of a unit history, they see them as two distinct units with no relationship to the units they were just minutes before. Luckily for 127th they will live again when the Aviation Brigade, 1st Armor Division stands up at Ft Bliss.

As for Aviation Brigade, 1st Infantry Division, Aviation Branch does not have much in the way of history on our

brigades. The last publication that contains historical information on aviation brigades was published in CMH Pub 60-12. This publication contains the heraldry as well as lineage and honors information on every aviation battalion up to that time.

One must remember we assign units differently now and the battalions of that era are now brigades. We are working several initiatives for the future to help rectify the issues of the past.

Here are some recommendations Dr Hughes, our Branch Historian suggests that can help lead us forward:

- Work with both the Institute of Heraldry and the Center of Military History to build historical data for the Aviation units and in turn publish that on the web.
- Work with Mr. Bedessem, CMH on the designation of new units like UASTB and the ERMP units that are currently being fielded.
- Have aviation units apply for campaign credits through the Human Resources Command.
- Continue gathering Branch-related information from the G-3/5/7 Aviation.
- Work with CMH on directing the Military History Detachments to gather information on the deployed CABs.

Lastly, I am working to establish a professional writing program at our Noncommissioned Officer Academy under the Senior Leader Course. The three tentative areas that students may write about include:

- An Aviation unit lost under transformation that should not be forgotten.
- An enlisted Aviation Soldier who made a lasting contribution to Army Aviation.
- A tactic, technique or procedure that aided in the care of aviation equipment or personnel.

I know that doesn't provide you much info up front; however, we need to start somewhere.

Again thank you for your question and all that you do as a Soldier for this nation and Army Aviation.

CSM G

cally in a contingency environment.

Management of airfields is a complex task typically performed by Department of the Army Civilians or contractors in fixed base facilities throughout the Army.

Airfield management personnel normally train on the job without a formal training program or course to prepare for these duties. Enduring Army airfields, in a non-hostile envi-

ronment, are success stories largely due to the dedication and professionalism of the people assigned to manage them. Contingency airfield management is an entirely different issue.

Contingency Support

To effectively employ Army Aviation and facilitate the intra-theater movement of personnel and cargo, airfield operational forces must be

trained and ready to provide airfield management throughout the full spectrum of conflict.

Army airfield management forces must integrate joint, coalition, and host nation policies and procedures to ensure the safe and expeditious operation of aircraft within the operational environment.

The ability to provide this assured airfield management capability is vital to the success of the Army as it conducts full spectrum operations throughout the global environment.

Training airfield operational forces is paramount to the future success of organizations within Army aviation. This training must be centered on joint capabilities to enable force projection and sustainment which ensure the ability to project and sustain forces from inter-theater and intra-theater distances.

Training of Army airfield operational forces must ensure the successful application of core capabilities.

Previously there was not an Army unit with the equipment and manpower necessary to handle the multitude of tasks associated with a large airfield.

Tasks such as maintenance of runways and taxiways, airfield markings, lighting, crash/fire rescue operations, and aircraft and passenger marshalling were absorbed by tactical units who are not manned, trained or equipped for such tasks.

The worst possible consequences of these airfield management issues were realized on Dec. 30, 2004, when a U.S. Air Force MC-130 Combat Talon aircraft landed on a runway at an Army airfield. The aircraft was destroyed when it encountered a 30-by-30 foot hole in the pavement created by ongoing repair operations. The result was one destroyed aircraft and 10 injured people, five seriously.

Fixing Inefficiencies

With the creation of airfield management organizations, specifically AOBs, came the employment of those forces to support combat operations in Iraq and Afghanistan.

The results of these deployments realized several inefficiencies and gaps in the Army's training mechanism of airfield management.

As a direct result of CAB commanders voicing their concerns of these specific training deficiencies, ATSCOM created a Contingency Airfield Management Workshop and



Figure 1

is committed to conduct this training semiannually until the certified training strategy is formalized. The next workshop is scheduled from 29 Nov – 10 Dec 2010.

Synchronized Support

Combined, what both ATSCOM and the TAOGs provide to all of Aviation is essential; together, they span the strategic, operational and tactical levels of war. This synchronization of ATS expertise and mission management ensures an efficient and effective use of this critical asset.

Today's ATSCOM and TAOGs are ready, relevant and resolute to provide aviation with full spectrum ATS solutions!

If you have a great story I would ask you to send it in to Quad A or to me at the Aviation Center so I can share with others. Above the Best

Glidewell



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.

COL James Macklin is the commander, Air Traffic Services Command and the 164th Theater Aviation Operation Group; CSM Lee Kennedy is the ATSCOM command sergeant major, and CSM Ron Ronsairo is the command sergeant major of the 164th TAOG.



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U.S. Army Combat Readiness/Safety Center



Giving Thanks, Looking Ahead

By BG William T. Wolf

This month, we honor the sacrifices of our men and women in uniform, past and present, and give thanks for the many blessings that distinguish the United States among all other nations in the world.

I personally am thankful for the opportunity to serve alongside the Soldiers, Families and Civilians of this great Army. Each of you makes a tremendous impact every day, and I continue to be humbled by your service and sacrifice. We have much to be thankful for as an Army.

This past September, we officially transitioned from a combat mission to an advisory and assistance role in Iraq, marking the conclusion of more than seven years of armed conflict there and the transition to an Iraqi-led mission.

Every member of our Army Family — Soldiers and Leaders on the front lines and those in support roles at the rear, loved ones maintaining watch at home and Civilian employees providing the foundation for sustained operations — has played a vital part in bringing this outstanding accomplishment to fruition.

As we refocus our full attention to our continued role in Afghanistan, rely on the experience and knowledge you've gained thus far and the expertise of those around you to keep all your Soldiers safe and in the fight.

Beginning The Annual Assessment

November is also the time of year we begin to compile the data outlining our Army's safety performance during the previous fiscal year. The good news is that, in fiscal 2010, we did not see a significant increase in Soldier fatalities following the historic reductions made in fiscal 2009.

In safety, we always say a loss is a loss, no matter how it happens. But on the flip side, every Soldier saved is a Soldier saved, whether it's attributed

to engaged leadership, intervention by Family and friends or simply increased awareness by the Soldier through education and training.

We've learned over the past two years that all three of these measures work, but clearly the most important constant that time and again makes the largest difference across our Army is engaged leadership.

The most critical point of this engagement is at the lowest level, where leaders know their Soldiers best. The senior leader's role is not only to remain engaged, but also to support their subordinate leaders through mentorship and example.

Vigilance During the Holidays

The hectic holiday season will get underway soon, and I ask that you redouble your efforts in keeping both yourself and your Soldiers, whether subordinates or peers, safe.

Use every tool in your safety arsenal to ensure everyone makes it back safely after the holiday, and start by talking to your Soldiers about their plans.

You might be surprised at how open they'll be, so take advantage of this time to offer suggestions for mitigating the risks associated with each Soldier's scheduled activities.

The new "comments" feature on the Travel Risk Planning System presents a great opportunity for subordinates and supervisors to open dialogue on driving safety. Check out the tool at <https://safety.army.mil>.

Dealing With The Cold

By now, the chill of fall and winter can be felt in nearly every location our Army operates. Cooler temperatures and severe winter weather create hazards for our Army team both on and off duty, especially when working outside or driving on slippery roads.

The USACR/Safety Center recently



Biloxi, Miss., native SGT Derek Cranford, an armament specialist for Co. D, 1st Bn., 227th Avn. Regt., 1st Air Cav. Bde., 1st Cav. Div., took a break from loading rockets to give his daughter, Lily, a better view of the forward arming and refueling point (FARP) during family day at Fort Hood, TX, July 12.

launched this year's Fall/Winter Safety Campaign ("No Time to Chill") to provide leaders, safety officers and Soldiers vital information for staying safe during fall and winter activities. The 2010 campaign kit includes feature articles, posters and videos promoting awareness and mitigation of fall and winter hazards.

All campaign products can be viewed and downloaded via the USACR/Safety Center website.

Hunting Safely

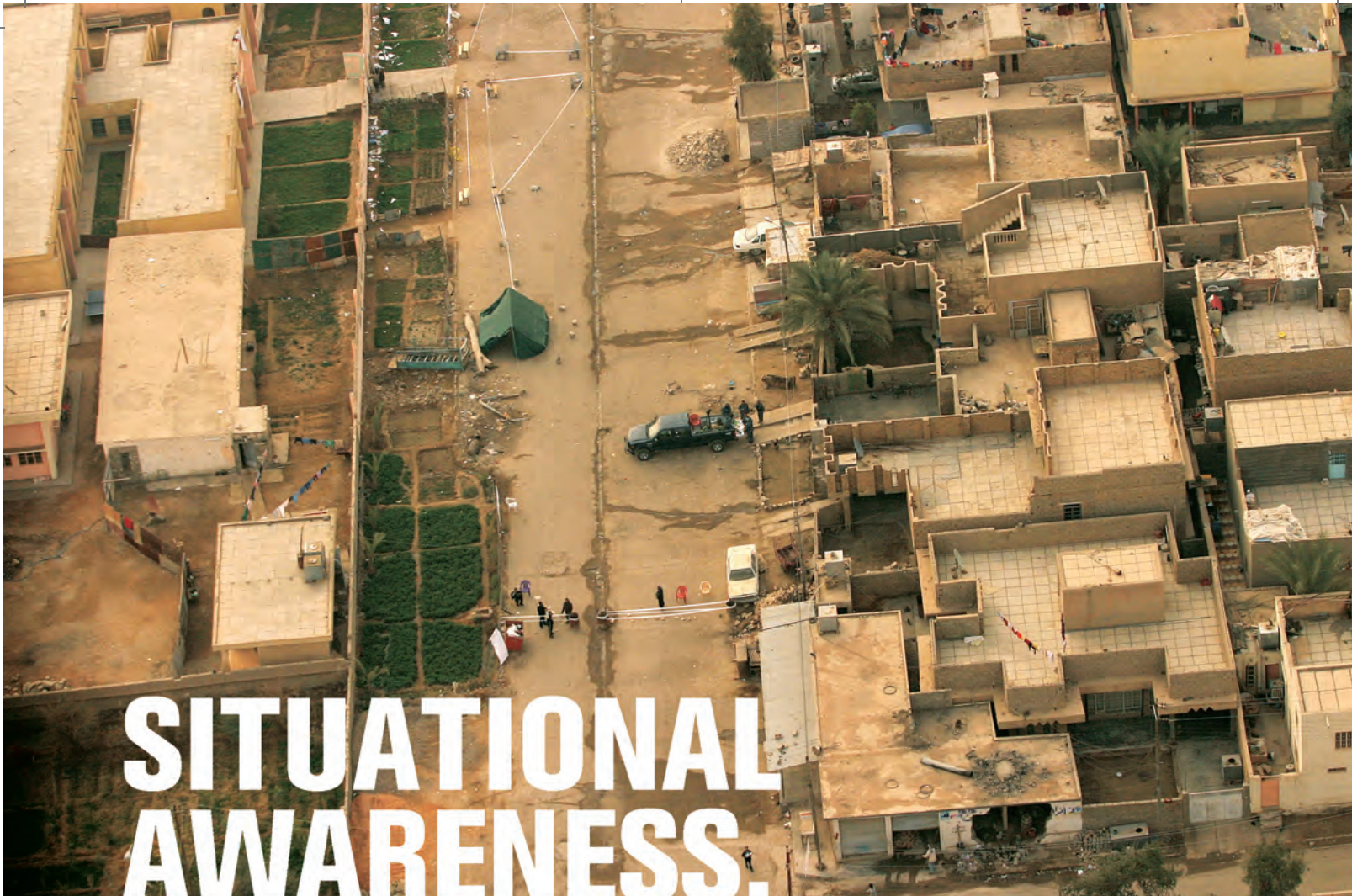
Also be sure to encourage the hunters in your unit to visit the Firearms Safety Techniques challenge available on our website. While the challenge does not replace hunter education classes, it is a great awareness tool for weapons enthusiasts and hunters alike.

I thank you again for your contributions to the accomplishments of this past year and what you do every day for our Soldiers, Families and Civilians. Take that same passion forward in fiscal 2011, and remember to always stay engaged, stay informed and stay safe in everything you do.

And wherever your plans take you, have a great November!

Army Safe is Army Strong!

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



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U.S. Army Aviation Logistics School Update



COL Reeves
Commander



CSM Samuels
School SGM

Lean Six Sigma (LSS) Training at USAALS 6σ

By CPT Courtney R. Mills

I've asked CPT Courtney Mills to discuss Lean Six Sigma training in this monthly update from your aviation maintenance school house.

COL Reeves

In line with the United States Army Aviation Center of Excellence (USAACE) process improvement philosophy, USAALS is using the Lean Six Sigma (LSS) methodology to look at how we conduct aviation maintenance training to support the "new normal" of the Army Force Generation (ARFORGEN) model.

Lean Six Sigma is the Secretary of the Army's chosen business process improvement technique for transforming today's institutional Army.

USAALS is applying the process to its training mission to examine how training development and delivery can be improved.

One of the great costs of institutional training to the Army is having Soldiers in what is known as the Trainees, Transients, Holds and Students (TTHS) account.

Soldiers in these categories are not in the war fight and count against unit and Army readiness representing, in many cases, a liability versus an asset to the Army.

While training is necessary, it is important to examine how it can be done better, quicker, and more cost efficiently while maintaining high standards of quality.

Army aviation maintenance training is a production operation. It produces a clearly identifiable product (a military occupational specialty [MOS]-trained Soldier) over a prescribed period of time or cycle (course length) to work at a prescribed level of quality.



USAALS COURTESY PHOTO

LSS is intended to reduce cycle time (course length) as well as improve the output quality of administrative, manufacturing and repair processes or, in this case, the training processes.

The LSS technique applied to USAALS training ensures the school's ability to provide the people, training, resources, quality of life and infrastructure that are critical to fully align with Army aviation's priority of accelerating transformation and process improvement.

Black Belt Qualification

USAALS initiated its first Black Belt Qualification Course on 20 September 2010. This is a four month course of instruction which is covered in several phases with each phase lasting a month.

Each phase consists of one week of classroom study to teach the LSS

Strategy followed by three weeks of individual study on assigned projects.

For each phase, the students create a detailed Tollgate Presentation to demonstrate their execution of the current phase.

LSS is grounded in the define, measure, analyze, improve and control (DMAIC) philosophy.

Throughout the Tollgates, the DMAIC Philosophy is dissected and implemented.

The Phased Approach

Define is the first week. This phase focuses on identifying and/or validating customer requirements (needs of Aviation Brigades), project goals, and project scopes.

Each student prepares a team which will assist throughout the student's project. These team members are often instructors and leaders within the course or project's subject matter.

The second phase covers *Measure* which identifies measurement systems as well as the baseline service performance.

The third phase discusses *Analyze* which teaches analytical and statistical techniques for identifying the potential root cause of identified problems.

The fourth phase approaches the *Improve* and *Control* aspects of DMAIC.

Specifically, the *Improve* stage covers statistical techniques for finding solutions to improve performance and optimize performance gains; while the *Control* stage discusses applying techniques to prevent future defects from occurring and building a process control plan in order to sustain the gains achieved by the project.

Training Trainers

This first iteration of training is only the start to implementing LSS within USAALS. This will establish a "train the trainer" base which will enable infusion into the professional military education (PME) level courses as well as the operations and func-

tions of the school.

This course currently has 18 students consisting of a training department director, division chiefs, company commanders, company 1SGs, company executive officers, warrant officers and civilians. Each person who goes through this training works a real world project within USAALS.

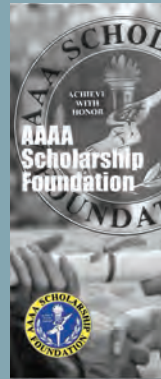
It is an excellent opportunity to train Aviation leaders on LSS and the school directly benefits from the completion of each project.

Future plans call for a two month Green Belt Course and additional Black Belt courses.

COL Terence W. Reeves is Commander, U.S. Army Aviation Logistics School, Joint Base Langley-Eustis, VA.

CPT Courtney R. Mills is the commander, 3rd Staff and Faculty Company, U.S. Army Aviation Logistics School (USAALS), Joint Base Langley-Eustis, VA.

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Special Focus: Unmanned Aircraft Systems



Cargo Unmanned Aircraft Systems – Exploring the Optionally Piloted Vehicle Concept

By COL John M. Lynch and Mr. Glenn A. Rizzi

The Army Aviation Capabilities Based Assessment for 2015-2024 specified the following gap exists in sustainment support operations: “The combat aviation brigade has inadequate capacity to simultaneously provide routine aerial sustainment and to support tactical operations.”

What this means is that many forward operating bases and outlying combat outposts must rely on ground resupply methods – often placing Soldiers and supply convoys at risk on roads.

Further, sustainment to these remote formations often becomes an emergency condition in many cases.

The U.S. Marine Corps has also identified a gap in routine aerial sustainment and, in an effort to answer part of a Joint unit operational needs statement, is working toward deploying a cargo unmanned aircraft system (UAS) capability as an operational assessment of the concept to theater in 2011.

An Army Strategy

There is much analysis to be done to better define advantages and disadvantages of cargo UAS as opposed to

just increasing manned ground and aerial sustainment operations.

Introduction of robotic ground vehicles will aid in reducing the number of Soldiers on convoys. Future sustainment operations will likely include a combination of unmanned terrestrial and aviation vehicles.

At the U.S. Army Aviation Center of Excellence we are documenting emerging requirements and visions and are initiating or participating in several studies to determine cargo UAS benefits.

The USAACE has a UAS work group in support of the Sustainment CoE in order to develop the capability requirements for aerial sustainment.

The Joint UAS Center of Excellence also chairs a Cargo UAS Work Group which is exploring development of a joint concept of operations, and an initial capabilities document and/or capabilities based assessment.

Emerging Cargo UAS Requirements

Early in February, the Department of the Army, G-4, released an Army Regulation 5-5 study entitled, “Future Modular Force Resupply Mission for

Unmanned Aircraft Systems.”

The study recommends an employment course of action that places the cargo UAS capability, to include its support element, in direct support of the lowest level logistics unit in the chain to enable it to handle the tactical responsibilities associated with the UAS capability, mainly at the brigade support battalion.

The Combined Arms Support Command is currently conducting a sustainment operations capabilities based assessment that is considering and evaluating materiel and non-materiel solutions to meet sustainment gaps. A cargo UAS will be considered as a materiel solution that may mitigate the gaps.

The Army also authored a Joint Unmanned Systems Initial Capabilities Document (ICD), dated May 24, 2010, that requires an unmanned cargo capability. This ICD was approved by the Army Requirements Oversight Committee and is currently with the Joint Staff for review.

Finally, the U.S. Army Roadmap for Unmanned Aircraft Systems



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Here in this artist's concept illustration, an optionally piloted vehicle would have a type of selector switch in the cockpit which would allow either a crew, single pilot or a remote operator to control the aircraft. The selected option appears on the multi-functional display above.

(UAS): 2010 to 2035, released in April 2010, identifies the use of a sustainment/cargo UAS capability to reduce this gap for the logistical community; and is identified as a potential mid-term (2016-2025) to far-term (2026-2035) capability that enables a transition or bridging from manned to unmanned systems.

The Army Roadmap proposes the concept of a cargo UAS, which "...may provide routine sustainment functions in the delivery of supplies and materials to forward deployed units. In the future, unmanned sustainment aircraft may conduct autonomous supply and retrograde operations as well as extraction of damaged parts for repair."

The intent of a sustainment or cargo UAS is to be able to deliver routine, mission critical and time sensitive supplies to smaller sized units (such as companies, detachments, platoons or squads) located at combat outposts across uncertain to hostile environments and at great distances.

Currently, the cargo UAS is envisioned to be capable of providing responsive and uninterrupted sustainment support, which leads ultimately to increased freedom of actions and operational reach.

By the mid-term period, it is anticipated that approximately 25 percent of the Army wide aerial logistics sustainment and cargo delivery requirements could be met by maturing cargo UAS capabilities.

The OPV Concept

During Aviation Transformation Study II, analysis indicated we could gain efficiencies in our utility fleets (UH-60 and CH-47) if we could develop enough autonomy (or pilot aiding) to reduce the number of pilots in aircraft executing routine administrative missions.

Battlefield circulation and routine aerial resupply might

be possible with a single pilot if we could develop methods to reduce pilot-workload without sacrificing safety.

Extending this theory, we may be able to gain more utilization of the fleet we have already procured, as well as save aircrew members for more complex missions, if we eliminate the manned component entirely by optionally piloting some of the aircraft.

The optionally piloted vehicle (OPV) would have an autonomous and/or semi-autonomous capability which integrates an alternative means of ground control, precision approach and landing, autonomous flight controls, and cargo handling technologies to selectively remove the man from the cockpit, while maintaining the full spectrum of flight profiles for resupply delivery and air movement.

This is based on using new technologies to re-equip an aircraft with additional hardware and software which allows it to be flown remotely by a ground based operator, or by a pilot(s), depending on the situation and parameters of a given mission.

As an example, a system mode selector switch in the aircraft's cockpit could be set to the "zero" or no crew position and a remote operator would be able to fly the aircraft using onboard autonomous systems to safely operate and control it.

The zero position could also be used to conduct a multi-chalk mission with a series of aircraft electronically coupled to a lead aircraft (with or without an onboard crew) and flown in a tethered or "daisy chain" mode from one point to another.

This method could be used for a routine cargo flight involving only supplies. We do not believe we are ready to trust unmanned technologies for movement of personnel.

A second setting on the system mode selector is a "1" or single pilot only position. Here, just one pilot could operate the aircraft assisted by a combination of autonomous and/or semi-autonomous control inputs and systems monitoring to reduce the workload.

Additional aircrew members (crew chiefs, door gunners) may still be required for mission completion, safety and/or force protection. In this case, the flight might be a combination of moving people and supplies between two or more locations and the addition of a pilot might be necessary based on mission risk factors.

The third option on the system mode selector is the "2" position for full control of the aircraft by onboard pilots flying in support of complex tactical missions.

The use of program of record (POR) aircraft, such as the UH-60M Black Hawk and the CH-47F Chinook helicopters, provides a potential cost savings over establishing a "new start" program and also help to retain the capabilities and performance standards of established and mature aircraft programs.

The Army Aviation CoE hopes to complete a study in 2011 to better understand advantages, limitations and cost of the OPV concept.

OPV Demonstrator

The Army's Aviation and Missile Research, Development and Engineering Center (AMRDEC) is the lead agency working with the Sikorsky Aircraft Company to develop the manned-unmanned resupply aerial lifter (MURAL), a proof-of-concept demonstrator for further evaluation and potential integration.

The MURAL system is based on the relatively new UH-60M model Black Hawk helicopter, and would be able to carry between 3,000 to 9,000 pound payloads within a 250 nautical mile combat radius. If the concept proves itself, there is a potential to spin the technology to future production UH-60M aircraft in fiscal year 2014 or FY15.

In addition, AMRDEC is working to mature alternate control means using a voice recognition system for spoken "command" controls. This cargo system would be comprised of autonomous capability UH-60M aircraft, a ground control station with a voice recognition system, aircraft status monitoring, and autonomous external load monitoring and control.

The first scheduled flight of the demonstrator is expected during the first half of FY2011.

Closing Thoughts

The development and the integration of an optionally piloted cargo unmanned aircraft are envisioned to benefit the Army with an increase in capacity and operational tempos in the conduct of aviation operations.

The Army UAS Roadmap envisions the majority of routine aerial sustainment missions to be flown by unmanned aircraft systems in the out years of 2030 to 2035.

The transition from the current fully manned aerial sustainment missions today to an unmanned operational capability in the future will lower the risk to personnel by reducing the number of needed ground convoys and the risks to manned aircraft conducting aerial sustainment operations.

Perhaps an optionally piloted aircraft performing sustainment operations is a precursor to single purpose cargo UAS of the future.

The Army Aviation Branch is committed to providing resilient and adaptive full spectrum manned and unmanned aviation support to meet the requirements of the future security environment.



COL John M. Lynch serves as the director and retired LTC Glenn A. Rizzi serves as the deputy director of the U.S. Army Unmanned Aircraft Systems Integration Center, previously known as the UAS Center of Excellence, at Fort Rucker, AL.



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Manned/Unmanned Teaming Operations: A Marriage Forged in Combat Finds a Home in the CAB

By COL Gregory B. Gonzalez and Mr. Lawrence Shelton

The Army has learned many lessons over the past decade when it comes to the uses, opportunities and benefits of unmanned aircraft during combat operations in two theaters of war.

Perhaps no opportunity has more potential than teaming the endurance and sensor collection capabilities of an unmanned aircraft with the sheer war-fighting capability of the Army Aviator in his/her magnificent flying machine.

The synergy created by this pairing will soon be available in the combat aviation brigade (CAB) and the new full spectrum combat aviation brigade (FSCAB). The CAB has evolved in

terms of size, mission, and aircraft design in more than 100 years of rich Army aviation history.

Although there have been significant technological advances in the CAB, few changes have been as revolutionary as the upcoming hybrid manned-unmanned teaming – level 2 (MUMT-2) configuration set to be fielded in FY11 and deployed in FY12.

The Army Unmanned Aircraft Systems (UAS) Project Office (PO) and their partners in PO Apache and PO Armed Scout Helicopter have been key players in the effort to field manned-unmanned technologies to the CAB.

This article describes these evolving capabilities set to support our Warfighters in the very near future.

Introducing the Full Spectrum Combat Aviation Brigade (FSCAB)

The standard structure of the CAB organization includes 24 AH-64D, 21 OH-58D, 15 HH-60, 12 CH-47 and 38 UH-60. Beginning in FY11, the 1st CAB/1st Cavalry Division, will receive one company of Gray Eagle Unmanned Aircraft (formerly known as

the Extended Range/Multi-Purpose UAS) and the 101st CAB will receive two platoons of Shadow UAS as part of its transition to be the initial FSCAB.

After the initial fielding with the 1st CAB, a Gray Eagle company is also scheduled to be fielded to two additional CABs per year beginning in FY12 thru FY17. The inclusion of these Gray Eagle companies will initially take place in the standard CAB design and will remain an integral component of the FSCAB design.

Gray Eagle company capabilities include 30-hour-seven-day-a-week operational tempo with electro-optic/infrared/laser designator, synthetic aperture radar, ground moving target indicator and communication relay payloads. Gray Eagle aircraft will also be fully weaponized with four HELLFIRE-II UAS variant missiles.

The original Gray Eagle system configuration was recently modified as the result of the 2010 Aviation Capability Portfolio Review led by GEN Peter W. Chiarelli, the Vice Chief of Staff of the Army (VCSA).

The result is a more flexible, more



Shadow 200 launch.



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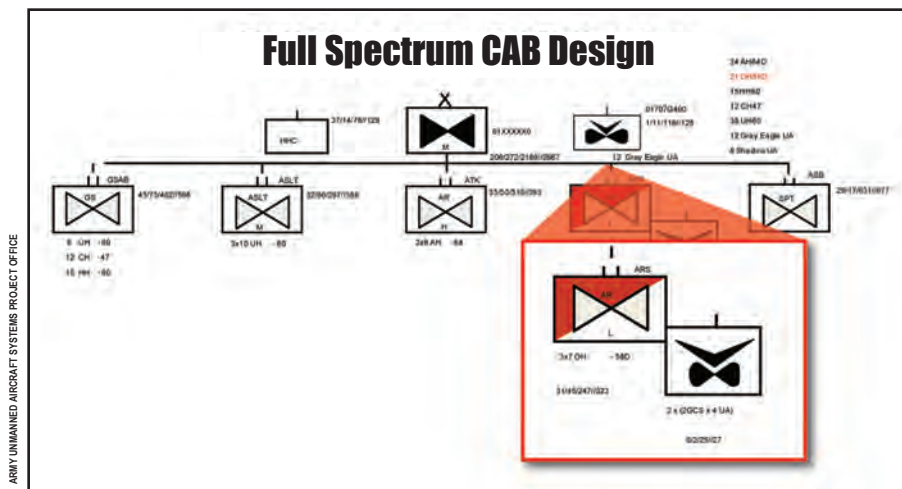


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As part of the 2009 Aviation II study, the Army created a new hybrid formation to improve manned unmanned teaming; it also sought to improve surveillance and reconnaissance missions by taking advantage of the UAS increased endurance.

efficient system configuration that will provide more systems in theater and more flight hours per system in support of a division formation.

The new Gray Eagle company configuration consists of three equally effective modular platoons. This gives a FSCAB commander the flexibility to rotate platoons in and out of theater as modular units to sustain a more tol-

erable boots-on-ground/dwell time while still maintaining significant capability forward in the fight.

The role of the FSCAB as it relates across the spectrum of Army combative commands remains crucial. The makeup of the FSCAB remains constant whether its parent division is light infantry, mechanized infantry or armor.

Shadow 200 tactical UAS (TUAS)

are also being added to the FSCAB structure and will be introduced first into the 101st CAB in FY11.

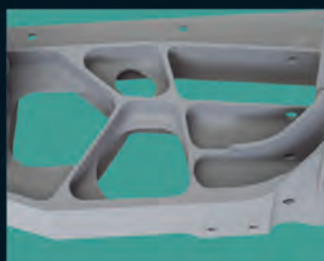
The "armed recon squadron" will receive two platoons of RQ-7 Shadow 200 TUAS that will work hand in glove with the squadron's OH-58 Kiowa fleet. Each Shadow platoon consists of four Shadow unmanned aircraft, and two ground control stations. Each platoon is augmented with two contracted field service representatives.

New Equipment in the Manned Aviation Fleet Facilitates MUM-T

The final puzzle piece that will allow the Apache, Kiowa, Gray Eagle and Shadow to work as one team is the addition of One System[®] Remote Video Terminal (OSRVT) functionality integrated into the Apache and Kiowa cockpits.

The OSRVT functionality allows pilots within these aircraft to receive Gray Eagle and Shadow full motion video feeds in their cockpits and to control their sensors, in essence placing the hunting dog out ahead of the hunter.

The relevance and added value of receiving UAS sensor video in the cockpit of an Army manned aircraft



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was proven tactically in theater with the fielding of the Apache Visual User Interface Tool (VUIT-2) demonstration battalion to Iraq in 2009, which took MUM-T to a new level.

MUM-T integrates air-ground operations using manned systems and unmanned systems to accomplish reconnaissance, attack, lift and command and control missions to enable decisive action at the time and place of the maneuver commander's choosing.

In 2009, for the first time, Apache crews could use the sensor on the UAS just as they use a sensor on-board their own aircraft, except that the UAS sensor could be located 50-80 kilometers forward of the Apache.

This new capability enabled the crew to locate, identify and target the enemy, then share the information in real-time with friendly forces, while providing an unprecedented standoff range from threat weapons.

With the addition of OSRVT retrofitted into traditional manned aircraft, manned crews will be able to shuttle back and forth between the fight and forward arming and refueling points (FARP) or forward operating bases (FOB). In other words, the crew can

reload and refuel then return to the fight without ever losing sight of their target(s). There are many instances of our Warfighters eliminating or incapacitating enemy combatants as a result of shared video footage.

Although integration of the OSRVT-like capability has been ongoing for several years in the Apache, funding is now available in FY11 to begin the integration of this capability into the Kiowa cockpit, thereby rounding out the full MUM-T capable FSCAB stable of aircraft.

Apache and Kiowa crew members will be able to acquire targets through UAS video data and will be able to laser designate those targets with the same UAS aircraft.

Now manned aircraft can be located miles behind the unmanned aircraft and worlds away from danger and still be able to hunt, find, and eliminate the enemy. Unmanned systems are revolutionizing the way we fight.

Persistence and Endurance over the Battlefield

The most untradeable aspect on the battlefield in terms of unmanned platforms is persistence and endurance -

capabilities that can't be matched by manned helicopters.

The new FSCAB's manned/unmanned design leverages the unmanned system's capability for extended persistence over the target with the firepower and flexibility of the manned fleet and a powerful fighting force is the result!

In the not so distant past aviators may have been doubtful of the utility of the unmanned fleet. However, those reservations have been replaced by an acknowledgement that they can fight safer and with greater impact when teamed with these same UAS.

Once relegated to intelligence, surveillance, reconnaissance missions, the Army UAS fleet has now been embraced by the Aviation community and is linked by a marriage forged in combat.



COL Gregory B. Gonzalez is the project manager of the U.S. Army Unmanned Aircraft Systems Project Office, Redstone Arsenal, AL and Mr. Lawrence Shelton is a Wyle Incorporated /CAS Group contractor providing strategic communications support to the project office.



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Special Focus: Unmanned Aircraft Systems



MQ-1C Gray Eagle test flight.

TRADOC Capability Manager for Unmanned Aircraft Systems (TCM-UAS) Update

By COL Robert J. Sovo

With the publication of the Army's Unmanned Aircraft System (UAS) Roadmap this past year, the Army established a comprehensive way ahead for continued success in developing, fielding and employing UAS as an integral member of the Aviation and overall Army community.

A wide variety of agencies continue to build on the combat experience garnered over the past ten years which witnessed UAS growth from a token presence to a capability that is ubiquitous across the spectrum of operations.

Army UAS surpassed one million hours flown in April 2010 and will soon exceed one million combat hours.

It is imperative for the reader to understand, just as the non-commissioned officer is the "Backbone of our Army," our enlisted operators are the foundation of the success behind Army UAS, "The Eyes of the Army."

Highly trained and combat proven, Soldiers employing current UAS bring valuable lessons learned to our combat, materiel, and training developers as they integrate new technologies into the current and future force structure.

This article provides insights into the "State of UAS" and highlights ongoing innovations within the Army UAS community.

MQ-1C "Gray Eagle"

The age of the mounted warrior riding across the plains has yet another date with destiny with the naming of the Army's MQ-1C Extended Range Multi-Purpose (ERMP) UAS as the "Gray Eagle" after Chief Gray Eagle from the Lakota Sioux tribe.

The Gray Eagle UAS continues movement towards achieving initial operational capability (IOC), ready to enter the Army's Force Generation (ARFORGEN) cycle as a combat ready unit.

In preparation for IOC, Gray Eagle will undergo an initial operational test & evaluation (IOT&E), scheduled for September 2011, measuring the unit's effectiveness, suitability, and survivability in an operationally realistic environment. Missions will be flown in support of ground units at the National Training Center.

The Gray Eagle company will conduct launch, recovery, and maintenance operations from Edwards Air Force Base (EAFB). Specific tasks to be accomplished by the 128 Soldiers and 12 air vehicles of the Gray Eagle company include: three simultaneous missions (reconnaissance, armed reconnaissance, and attack) on a continuous basis, automatic take-off and landing, operations from multiple



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U.S. ARMY PHOTO TOLUAS

A Soldier hand launching an RQ-11B Raven.

locations, and Soldier maintenance.

Training for the First Unit Equipped in preparation for IOC will include New Equipment Training (NET), Doctrine and Tactics Training (DTT), and Mission Essential Task List (METL) training.

NET will initially qualify MQ-1C Gray Eagle operators (15W) and maintainers (15E).

DTT for the UAS operators consists of readiness level progression, crew qualification, gunnery training/qualification, and reinforcement of those tasks learned during NET.

Maintainers will hone their skills to sustain all MQ-1C sub-systems.

In addition to operators and maintainers, the parent combat aviation brigade (CAB) and division staff will receive training on system capabilities and methods of employment to meet the ground commander's tactical requirements.

Battle focused METL training will be conducted at both Fort Hood and EAFB before and after IOT&E.

Upon successful completion of its IOT&E and METL training, the Army will declare the unit "combat ready" and available to enter the ready pool for deployment.

RQ-7B Shadow

Current RQ-7B Shadow lifecycle upgrades have added a laser designator (LD) payload allowing Shadow operators to designate for direct and indirect fires.

In June, 2010, Project Manager (PM) UAS and the Army's Test and Evaluation Center (ATEC) successfully completed a limited users test (LUT) at Yuma Proving

Grounds, where the new Shadow LD payload was tested in operations with live fire artillery and Hellfire equipped OH-58D's.

To date, 14 Shadow platoons of the current 86 fielded, are equipped with two LD payloads each with a goal to equip all units.

An improved Shadow communications relay system was also tested to better meet the ground maneuver force's communications requirements.

To further improve RQ-7B capability, an extended wing (21 feet total) is also being fielded improving endurance from 5 to 9 flight hours.

Other improvements include an electronic fuel injection retrofit and a future encrypted data link.

This past year, the Army approved the Full Spectrum Combat Aviation Brigade (FSCAB). The FSCAB, based on the medium CAB design, equips the attack reconnaissance squadron with two Shadow platoons, allowing the Army to reap further tactical benefits from manned unmanned teaming operations.

RQ-11B Raven Small UAS (SUAS)

The RQ-11B Raven SUAS is the company commander's organic asset for dynamic tactical reconnaissance, surveillance, and target acquisition providing the small unit leader responsive situational awareness.

There are approximately 1450 systems currently fielded to the Army.

The Raven is operated, as an additional duty, by Soldiers from any MOS that have completed a TRADOC approved course of instruction.

Recent system upgrades are the incorporation of an encrypted digital data link, improved electro-optical payload, and upgraded embedded simulation.

The next incremental upgrade will be the Rucksack Portable UAS (RPUAS) increment II. The RPUAS "tool-kit" will be modular/configurable by the operator to meet specific needs of the small unit commander.

The RPUAS will provide micro-to-larger UAS air vehicles for short range and endurance "over the hill" to larger still manpackable air vehicles with improved optics, endurance, and laser designation capability.

The RPUAS will also be interoperable with unmanned ground vehicles and unattended ground sensors allowing the commander the ability to control/operate his organic ground and air robotics systems.

An RPUAS-like capability is currently deployed with a brigade combat team as a proof of concept.

UAS Interoperability

In an effort to ensure interoperability among Department of Defense UAS, the PM UAS is developing systems that comply with The Office of the Secretary of Defense unmanned systems interoperability profiles and Army UAS interoperability profiles.

The basis of integrated UAS profiles rests upon common waveforms, data links, payload formats/compression,

standard networking practices /protocols, and common human-machine interfaces (HMI). These profiles ensure capabilities for the One System Remote Video Terminal (OSRVT) and the future Universal Ground Control Station (UGCS) support Army UAS operations and provide down-link data from joint UAS.

The UGCS is designed to exploit the capabilities of multiple types of UAS simultaneously by providing a common operating view resulting in simplified training, positive habit transfer, and more effective employment of UAS by a universal operator.

The commonality of the UGCS eliminates the need for operators to learn UAS-specific HMIs associated with different UAS.

The universal operator will be trained and qualified in the operation of multiple air vehicles to include ERMP, Shadow, and Hunter, as well as their associated payloads.

Operators will have levels of interoperability to enable communications, video exchange capabilities, and Manned-Unmanned (MUM) operations with Army helicopters and OSRVT operators. This will enable flexible, mission-tailored support, across any area or operations.

The OSRVT continues to be a success story for the Army. Current fielding is surpassing 2,495 systems.

Future enhancements will include improved encryption and the ability of the user to take limited control the EO/IR payload. Fielding of the enhanced, Increment of II systems will begin in 2011.

The Army and the Defense Advanced Research Projects Agency are currently conducting technology demonstrations of Heterogeneous Airborne Reconnaissance Team (HART). HART is a compilation of hardware and software technologies, which will integrate UAS systems, and provide a broad array of imagery, situational awareness, and asset request tools to commanders.

The Army is currently testing HART and is considering deploying a quick reaction capability upon a successful evaluation.

Final Thoughts

2010 was a busy, informative, and exciting year for the entire Army UAS community. Our outstanding enlisted UAS operators not only continued to provide lifesaving tactical support to ground forces, they also provided the collective UAS combat development team with ideas and challenges, charting the way ahead for future UAS initiatives.

We continue to leverage technology and proven tactics, techniques and procedures; we will also continue and improve our systems to meet the ever changing warfighting demands.

As we move forward implementing our UAS simulation strategies, we will provide our operators with significant increased training capabilities.

This initiative is extremely important as the Army continues to work UAS integration into the National Airspace System.



A Soldier prepares the RQ-7B Shadow for flight in Iraq.

UAS simulation will afford all warfighting functions the ability to mature everything from manned to unmanned operations, to fully understanding the employment advantages UAS provide.



COL Robert J. Sova is the TRADOC Capabilities Manager for Unmanned Aircraft Systems at the U.S. Army Aviation Center of Excellence at Fort Rucker, AL.

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The Unmanned Aircraft Systems Training Battalion: Growing and Transforming to Meet the Voracious Demand for UAS Capability

By LTC Patrick Sullivan and MAJ David M. Church

Special Focus: Unmanned Aircraft Systems

The Unmanned Aircraft Systems Training Battalion campus, Fort Huachuca, AZ.

UASTB COURTESY PHOTO



PHOTO BY AMY SUNSER, FORT HUACHUCA SCOUT

PVT Timothy Strong (left) and PFC Deanna Lucchesi, Co. A, UASTB, inspect a Shadow UAS during a field training exercise on Fort Huachuca, AZ.

Situated 6 miles from the main post of Fort Huachuca, is a sprawling and picturesque complex that supports the critical mission of training UAS operators and maintainers.

The Unmanned Air Vehicle Systems Training Center's lineage began on 17 Jan 1986 with the Army's establishment of the Unmanned Aerial Vehicle (UAV) Task Force. The Task Force set two world records for distance and endurance of expendable aircraft with the Exdrone UAV System in July 1987.

In 1989, the unit accepted the Pioneer UAV System, setting the stage for today's Unmanned Aircraft Systems Training Battalion (UASTB). UASTB was activated on 19 April 2006 during the transition of authority for Unmanned Aircraft Systems (UAS) training from the U.S. Army Intelligence Center to the U.S. Army Aviation Center of Excellence (USAACE) at Fort Rucker, AL.

Command and Control

Although geographically located at Fort Huachuca, the UASTB's headquarters is 1st Aviation Brigade, USAACE at Fort Rucker. UASTB remains the Army's only initial entry training battalion in support of the military occupational skills 15W, UAS operator, and 15E, UAS maintainer training.

U.S. Army Unmanned Aircraft Systems Roadmap 2010-2035

The UASTB stays in step with TRADOC and USAACE priorities and the UAS Roadmap while enhancing the training techniques required to exploit the theme of "Eyes of the Army" and providing persistent surveillance and actionable intelligence to the Warfighter.

UASTB is also positioned to support future initiatives including the full spectrum brigade and Aviation Study II.

The battalion supports the employment of UAS across all tactical echelons.

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UASTB COURTESY PHOTO

External Operator student takes off a Hunter UAS at Rugge-Hamilton Airfield at UASTB, Fort Huachuca, AZ.

lons, in both Army and joint operations, providing the Warfighter a disproportionate advantage to meet multi-role capabilities to include communications, reconnaissance, and armed response.

Mission

The UASTB's mission is to conduct UAS operator, repairer, warrant officer technician, and leader training in order to provide ground force commanders with highly trained, combat ready Aviation Soldiers.

The Battalion's primary focus in accomplishing this mission has been instilling aviation rigor within the different programs of instruction (POI) throughout the UAS community.

The systems training at the UASTB include Hunter, Shadow, Warrior-A, and the recent addition of the Gray Eagle.

Task Organization

The UASTB is comprised of four companies. Company A is made up of advanced individual trainees; Company B conducts daily flight operations from Rugge-Hamilton and Pioneer Runways for all students and currency flights; Company C conducts Warrior-A and Gray Eagle operator training; and headquarters and headquarters company is responsible for the development and administration of five POIs: Shadow UAS Repairer, Hunter UAS Repairer, UAS Operator Common Core, 150U UAS Warrant Officer Technician, and UAS Unit Commander and Staff Officer Leader Course.

HHC also provides training development, information technology, personnel, logistical, audio visual, flight line maintenance, and emergency medical support to the battalion.

Additionally, the UASTB is responsible for two quick reaction capability (QRC) Gray Eagle units.

These two companies are attached to UASTB for training and readiness per permanent orders until deployed in support of overseas contingency operations (OCO).

The Crown Jewel For UASTB – The People

The most critical resource to meet the demand for UAS capability is its workforce. The battalion maximizes its dedicated workforce which is comprised of 600 military personnel, Department of Army Civilians and contractors.

The unity of effort from this skilled team has contributed to the battalion's successes and favorable reputation.

Our most valuable resource will continue to remain our personnel, regardless of how far technology advances and develops more advanced UAS systems, because the human touch is indispensable in both operating and instructing UAS.

World Class Training Area

The battalion now operates the largest UAS training center in the world, with over 125,000 square feet of training space, support facilities, and three separate runways, totaling over 17,000 linear feet.

The restricted airspace to support unmanned aircraft training operations is over 1,318 square miles, roughly the size of the state of Rhode Island.

Operations at Libby Army Airfield, Fort Huachuca, in Class D, support Warrior-A and Gray Eagle UAS training due to the longer runway requirement.

Training Throughput

As a result of the Office of the Secretary of Defense and the Department of Army increased demand for UAS, the UASTB student throughput proliferated from 1006 students in fiscal year (FY) 2008 to 2039 students in FY 2010.

This is an astounding 102 percent increase in student throughput.

The UASTB's full 3-shift, 16/6 hour operations, continues to meet the Army, Army National Guard (ARNG) and United States Marine Corp (USMC) throughput requirements, while maintaining a virtually non-existent HOLD population.



UASTB COURTESY PHOTO

Gray Eagle prior to start-up in front of Co. C, UASTB, Libby Army Airfield, Ft Huachuca, AZ.

Safety

Through an aggressive, hands-on approach to safety and standardization, the battalion and the UAS community as a whole have seen minimal UAS accidents and incidents throughout FY 2010. This is attributable to active leader involvement as leaders engage their people and carry a genuine fervor to the UAS mission.

For FY10, UASTB flew a total of 5,670.6 hours: 446.4 hours in Hunter, 3,117.2 hours in Shadow, 1,055.2 hours in Warrior-A, and 1,051.8 hours in Gray Eagle platforms; all without any Class A or B accidents.

MILCON

In order to meet USAACE training priorities, UASTB has received additional military construction resources.

Fort Huachuca is in the process of executing over 28.9M dollars in current and future funded programs all in support of the UAS Roadmap 2010–2035, the largest increase in military construction in the schoolhouse's history.

Warfighting Initiatives

15E – One of the most recent developments at UASTB has been the creation of a new military occupational

specialty (MOS) for UAS maintainers.

The 15E MOS replaces the Army's old strategy for UAS maintenance which utilized 15Js, 35Ts, and 52Ds for maintaining the fleet.

The new MOS utilizes the Shadow platform as the base of instruction.

Soldiers then return to Fort Huachuca to attend maintenance courses on the other platforms and earn additional skill identifiers (ASI), depending on the needs of the Army.

To earn the new MOS, Soldiers must pass seven modules of training, to include enabling skills branch, basic electronic theory, emplace/displace, maintenance, flight operations, troubleshooting, and flight line operations.

Following successful completion, Soldiers take part in a joint FTX with 15W operators, where they gain their first joint experiences working in a UAS platoon.

Gray Eagle – The programmed training for the first unit equipped (FUE) operators for the Army's MQ-1C Gray Eagle is ongoing. This landmark class follows both QRC2 (Operation Enduring Freedom) and QRC1R1 (Operation New Dawn) as the third Gray Eagle class to become platform qualified at the UASTB.

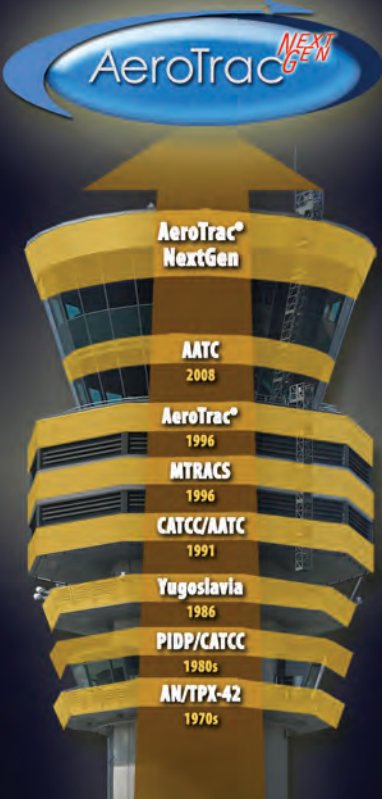
In addition to operator training, the UASTB is on the cutting edge of UAS maintainer training for the Gray Eagle; the first class graduated 8 students on October 27, 2010. The following class is comprised of Soldiers from the Shadow UAS Maintainers course (15E) to get their ASI U5. These Soldiers will also fill roles in the vanguard of the Gray Eagle FUE.

Summary

The UASTB has clearly surpassed the conventional duties of a U.S. Army training battalion in preparing UAS operators, maintainers, and leaders for the Warfight and continues to posture itself to meet the Warfighter's insatiable demand for pervasive, persistent surveillance and actionable intelligence, setting the foundation to meet the UAS Roadmap 2010-2035 and fulfilling the ongoing Army Force Generation requirements.



LTC Patrick Sullivan is the commander of the Unmanned Aircraft Systems Training Battalion at Fort Huachuca, AZ and MAJ David M. Church is the battalion operations officer.



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Evolving to Dynamic Airspace Management

By LTC Kevin D. Mobley and LTC (Ret.) James W. Kelton

Special Focus: Air Traffic Services

The Product Management Office for Air Traffic Control Systems (PM ATC) is responsible for the material development of, and is the overseer of the lifecycle management for all Army tactical and fixed base ATC systems.

PM ATC balances both tactical and fixed base airfield modernization efforts to ensure that units have the proper equipment and capabilities to do their missions (homeland operations, exercises, contingency operations, and war) and that they have requisite home station infrastructure support.

Modernization priorities include deployed and deploying units, fielding of new equipment and capabilities, continuous improvement of lifecycle management, and interoperability with a net-ready focus for expanded networks, collaboration, commu-

nications, and data sharing.

PM ATC's strategic focus over the next few years for tactical systems will focus on survivability, interoperability and commonality; while systems at fixed base airfields will begin to incorporate the Federal Aviation Administration (FAA) Next Generation (NextGen) National Airspace System (NAS) initiatives.

Current Systems and Initiatives

Within the ATC portfolio, significant milestones have been reached in the development of the following tactical and fixed base Air Traffic Control Systems: The Mobile Tower System (MOTS) (AN/MSQ-135), a deployable air traffic control tower and airfield lighting system, is currently in operational testing, and is on schedule to begin fielding in FY13.

Capabilities include enhanced survivability, advanced communication technologies, improved sustainability, commonality, and expeditionary airfield lighting.

The Air Traffic Navigation, Integration, and Coordination System (ATNAVICS) (AN/TPN-31) is a tactical mobile radar system consisting of

primary and secondary surveillance and precision approach radars for controlling and landing fixed and rotary wing aircraft.

Improvements include upgrades to computers, Airport Surveillance Radar (ASR) mapping, primary and secondary radar range extension, remote workstations, networking radar data to TAIS (see figure 2), and information assurance (IA) enhancements.

The Tactical Terminal Control System (TTCS) (AN/TSQ-198) is a highly mobile air traffic facility with ground-to-air and ground-to-ground communication capabilities which are used to provide Air Traffic Services (ATS) at remote landing zones, drop zones, and temporary helicopter operating areas.

Upgrades include integration of new communication technologies, improved survivability, improved sustainability, restoration of the 1km remote capability, and integration of Blue Force Tracker.

The Tactical Airspace Integration System (TAIS) (AN/TSQ-221) is a mobile communications and digitized battlefield automated system for airspace management.

TAIS improvements are highlighted in a separate article in this issue of Army Aviation magazine.

Fixed base Air Traffic Control System improvements include multiple installations of DOD Advanced Automation Systems (DAAS); Digital Airport Surveillance Radars (DASR); new Digital Radios with 8.33 KHz spacing (CM-300); Digital Audio Legal Recorders (DALR); Army Airfield Automation Systems (AAAS); and Fixed Base Precision Approach Radars (FBPAR).

These systems will significantly modernize and introduce new capabilities to all Army airfields and in the future will allow the networking of information with tactical systems for both home station operations and air traffic services in operational theaters.

Evolving to Dynamic Airspace Management

The U.S. Army's suite of Air Traffic Control Systems capabilities has evolved significantly over time and will continue to evolve with the above modernization efforts, but there are still enhancements required to move from

static procedural control to dynamically managed airspace in real time.

We need to improve our ability to attain situational awareness of all airspace users, especially at low-altitude, and have better Joint, Interagency, Intergovernmental, and Multinational (JIIM) interoperability during Airspace Command and Control (AC2) mission execution.

PM ATC and the Project Manager for Aviation Systems (PM AS), in coordination with airspace combat developers, are actively working toward that end.

Airspace Integration Improvements Initiative (AI3)

Commanders at all echelons must be capable of synchronizing forces and war fighting functions in the airspace in near-real time and that requires evolving our systems and processes toward execution-centric, dynamic airspace management.

The goal is to maximize freedom of maneuver in the third dimension, mass effects of combat power without massing forces, increase the timeliness of clearance of fires, and mini-

mize the potential of fratricide or collateral damage.

The answer requires a blending of ATC and airspace command and control (AC2) capabilities to integrate all elements of combat power in order to maximize effects in support of the ground commander's plan.

AC2 focuses on air-ground integration and manages, rather than avoids, risk (Figure 1).

AC2 is performed by specialists under the control of the chief of operations and is commander-centric.

To assist the commander with enhancing the AC2 mission domain, the Airspace Integration Improvements Initiative (AI3) provides a vision for integrating technologies and for transforming the procedural airspace management process into a dynamic model that will better facilitate immediate re-tasking of assets flying in support of the ground commander.

AI3 does not create a new program of record. It does, however, create a requirement to integrate and network existing programs into a system of systems (SoS) solution, taking systems and technologies that already



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Figure 1

exist and threading them together to provide enhanced capabilities.

AI3 seeks to provide incremental improvements for real-time collaboration and decision making among airspace stakeholders by addressing the following components (Figure 2):

- Network and correlate all sensors available to the commander to provide a robust "Air Common Operational Picture" for aircraft flying at low altitudes.

- Achieve shared collaboration and situational awareness with disparate JIIM systems via the TAIS Dynamic

Airspace Collaboration Tool [DACT] and Battle Command Consolidation thin client.

- Digitally transmit operationally relevant graphical changes to aviators in flight and UAS operators beyond line of sight (BLOS).

- Create aircraft protective volumes around air tracks to reduce reliance on the static, procedural airspace control measures of today.

- Improve current Air Tasking Order/Airspace Control Order (ATO/ACO) interfaces and processes that are ineffective for dynamic exe-



Air Traffic Navigation, Integration, and Coordination System (ATNAVICS) (AN/TPN-31)

cution by establishing a real-time interface to the U.S. Air Force system for AC2 (Theater Battle Management Core System [TBMCS]).

- Provide a cross-domain capability to share AC2 information.

- Bridge disparate data schemas used by different AC2 stakeholders through semantic data mediation.

Conclusion

Tactical ATC and fixed base systems will continue to modernize to ensure operational capability, regulatory compliance, and technological advancements.

The rapid pace of innovation and development in civil and military aerospace industries and airborne platforms require ATC systems to keep pace.

Through AI3, each airspace user, manager and controller will then have the capability to see the same air picture and collaborate in real time to avoid other users.

Aircrews in flight, UAS operators, indirect fire weapon system operators, and other airspace users will no longer be unnecessarily restricted executing their operation in support of the ground commander.

Ultimately, AI3 will reduce the risk of fratricide and mid-air collisions while maximizing aerial combat power.

LTC Kevin D. Mobley is the product manager for Air Traffic Control under Project Manager, Aviation Systems, Program Executive Officer Aviation, Redstone Arsenal, AL and LTC (Ret.) James W. (Jim) Kelton, is the assist product manager for the Tactical Airspace Integration System (APM TAIS).

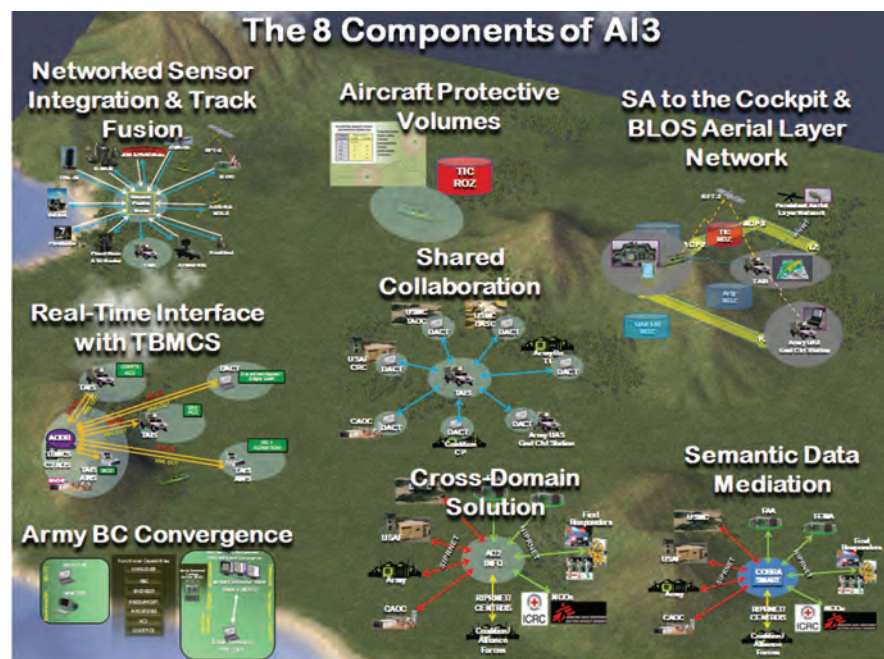


Figure 2

Tactical Airspace Integration System (TAIS) Modernization: The Journey Toward Net- Centricity

By LTC James W. Kelton, Retired.

Special Focus: Air Traffic Services

In 2007, the U.S. Army Product Manager for Air Traffic Control Systems (PM ATC) embarked on an aggressive schedule to transform its Tactical Airspace Integration System (TAIS) to a net-centric application of the Army's Battle Command family of systems.

As the Army's system of record for airspace management and enroute air traffic services, TAIS provides automated tools to plan, deconflict, synchronize, integrate, and execute operations in the third dimension of the battlefield for manned, unmanned, civilian, and military aircraft.

TAIS determines conflicts between sets of airspaces and between airspaces and terrain, providing the planner with decision aids to develop, execute, and monitor the airspace plan in accordance with the commander's risk parameters.

TAIS also provides near-real time situational awareness of the air picture, received through Tactical Digital Information Links, Blue Force Tracker, myriad radar feeds, and operator-generated flight following

tracks, constantly checking the position of these air platforms against active airspaces and alerting the TAIS operator when boundaries of active airspace measures are penetrated.

The Challenge

The challenge facing PM ATC was to evolve the TAIS information architecture from point-to-point data messaging interfaces to web services, the operating system from Solaris to Windows®, the obsolete 3D viewer to a state of the art product, and the underlying map engine to the Commercial/Joint Mapping Tool Kit (C/JMTK).

All of these changes had to be made while concurrently reducing procurement and total ownership costs and still delivering a fully tested and certified product by 2009.

Complicating matters further was the need to ensure that critical Joint interfaces with the Theater Battle Management Core System (TBMCS) were not broken; TBMCS is the system used by the USAF, USMC, and USN to plan and execute the air battle plan for operations and intelligence personnel at the force and unit levels.

The Solution

The first step was to build a programmatic and business case in order to identify requisite funding.

Due to lower procurement costs for Windows® laptops, and through negotiating a waiver of TAIS software licensing fees for the new Windows® applica-

tion with the prime contractor, General Dynamics C4 Systems (GDC4S), PM ATC was able to devise a plan to accelerate TAIS migration to Windows® without any increase in procurement funding while also decreasing the amount of research and development funding required for development of web services and integration of the service based architecture.

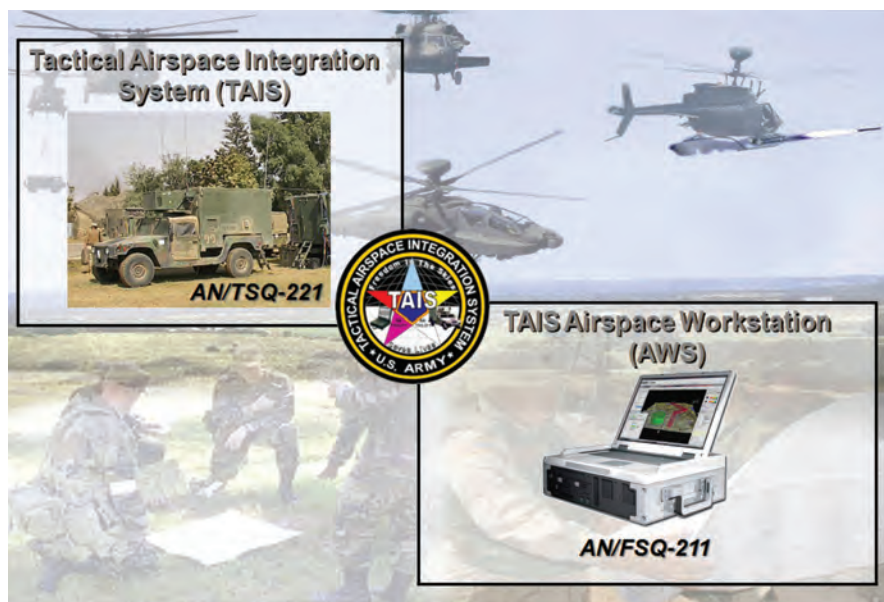
The accelerated TAIS Windows® Migration Plan resulted in this capability ahead of the previous plan and at a lower cost to the government and the taxpayer.

A Value Engineering study conducted in 2009 concluded that the TAIS Windows® migration resulted in cost savings or avoidances of \$3.9 million in fiscal year 2009 alone.

PM ATC and GDC4S relied heavily on software reuse from the previous Solaris-based TAIS software, from the Army's Command Post of the Future (CPOF) program, from NASA, and from the Defense Advanced Research Projects Agency (DARPA) in order to port the applications to operate on a Windows® Operating System and operate in a web-based environment.

TAIS also integrated the National Geospatial-Intelligence Agency's (NGA) C/JMTK as a powerful underlying Geographic Information System (GIS) layer.

C/JMTK is based on a single scalable open architecture with open development environments, incorporates



industry standards, and is provided at no licensing costs for DoD programs.

The software reuse effort proceeded smoothly and GDC4S delivered the product four months ahead of the new schedule.

Risk was managed through numerous technical performance reviews and by incorporating software development best practices from Carnegie-Mellon Software Engineering Institute.

Collaboration Is Key

The continuous improvement of TAIS includes enhanced collaboration; that effort is progressing under the umbrella of the Battle Command Consolidation strategy managed by the Project Manager for Battle Command (PM BC).

TAIS and Battle Command migration towards a service oriented, net-centric, system of systems can revolutionize the art and science of battle command, provide the warfighter with a significant combat multiplier in the near term, and provide more efficient and effective interfaces for convergence with other systems.

In support of this PM BC main effort, PM ATC worked alongside the materiel developer for CPOF and the Product Manager for Tactical Battle Command to identify critical issues in Battle Command migration and to create an early service based BC thin client prototype, named the Dynamic Airspace Collaboration Tool (DACT).

The success of the prototype resulted in a decision to "harden" and deploy the software to provide immediate capability for airspace collaboration to airspace users who do not have TAIS.

DACT replaces an archaic, form-based web service in the previous TAIS product by providing the disadvantaged or edge users access to a 3D visualizer called World Wind, developed by NASA.

World Wind provides a "Google Earth™-like" visualizer for the DACT. The DACT user can now simply point and click on the map layer to define the airspace geometry and then submit the request to TAIS after filling in required textual information such as start/stop times, name, purpose, etc.

Leveraging WSDL

Both the TAIS and its DACT leverage industry-standard Web Services Interface Language (WSDL).

The use of WSDL and other stan-



dard, open architecture web services means that the host computer is not limited to a specific operating system.

The DACT can be accessed by any computer on the tactical network running approved operating systems and web browsers when authorized by the TAIS operator.

The DACT continues to rapidly evolve, adding new features and collaboration capabilities. What PM ATC and GDC4S have learned through their experience with DACT is that web services can be developed, integrated, and deployed much faster than the previous acquisition models.

Fortunately, the Army's software blocking and certification processes have responded to this web services development agility by also making their processes more streamlined in order to get new capabilities to the end users in shorter time.

Morphing Airspace Management Procedures

The stated DACT capabilities are changing the way airspace management is conducted. An Army unit with TAIS can now collaborate in real time with a USMC unit, USAF air battle managers, and an Unmanned Aircraft System (UAS) ground control station simultaneously.

All elements of combat power can then be rapidly deconflicted by each of these airspace stakeholders and integrated into the ongoing tactical operation at speeds and accuracy that were previously impossible.

The ability to share situational awareness and collaborate between units to clear airspace for immediate air operations across geographic distance and boundaries can mean the difference between mission success or failure.

Under PM BC's Consolidation strategy, DACT functionality will be included in a new Battle Command Work Station thin client application scheduled for initial release in October 2010. PM ATC's significant achievements with evolving TAIS to true net-centricity have not gone unnoticed.

The Way Ahead

In February 2010, TAIS received the Institute for Defense and Government Awareness (IDGA) Outstanding U.S. Government Program award as part of the 2010 Network Centric Warfare Awards™. This award recognizes the program that best illustrates the concepts and execution of net-centricity to establish a measureable strategic or tactical advantage.

The government-industry TAIS Team has also undertaken development of a real-time web service interface with the TBMCS program in cooperation with the USAF Electronic Systems Command and is actively engaged in converging the airspace domain with Army Battle Command maneuver, fires, and logistics domains under the Battle Command Consolidation effort. And this journey toward net-centricity doesn't stop with TAIS.

Continued on page 49

Aviation Summit Focus is on Depot's Future

By Mr. Edwin J. Mickley



More than 700 attendees gathered at the American Bank Center in Corpus Christi, TX to gain insight on the new direction Corpus Christi Army Depot is taking in reducing cost, increasing production and focusing on Warfighter needs.

Industry and military leaders from across the Army aviation enterprise participated in panel and breakout discussions centering on present day aviation maintenance and future combat aviation brigade readiness during the 8th Annual Luther G. Jones Aviation Summit, Oct 12-14.

This year's theme, *Depot 2015: Full Spectrum Support to the Joint Fight*, captured CCAD's forward thinking – a strategic vision to drive down cost through a cost-conscious culture in preparation for the future while providing world-class support to the Warfighter.

Depot commander, COL Christopher B. Carlile said, "It's about the team effort to improve the entire aviation enterprise so we can provide world-class support to our Warfighters, not only for today, but down the road."

Keynote speaker, LTG James H. Pillsbury, Deputy Commanding General and Chief of Staff, U.S.



Mr. George A. Perez, Jr. with Corpus Christi Army Depot, is presented the 2010 Donald F. Luce Depot Maintenance Artisan Award by LTG James H. Pillsbury, Deputy Commanding General, Army Materiel Command along with (from right) Robin Stokes and Gail Davis, LTC Donald Luce's daughters, and CCAD Commander, COL Christopher B. Carlile.

Army Materiel Command, remarked how important CCAD was to the fight saying that aviation's mission is critical to our success in Afghanistan and CCAD efforts support the mission today and well into the future.

Following his comments, Pillsbury assisted in an awards presentation which included the Donald F. Luce Depot Maintenance Artisan Award.

Named for the man who was instrumental in securing approval for the Army to have its own aviation depot maintenance facility (CCAD) and who was the first Director of Maintenance, this newest AAAA National Award was presented for the first time this year.

Mr. George A. Perez Jr. received the award for his outstanding skill and accomplishments as a Patternmaker in the CCAD Foundry Shop where, among other achievements, he created a Caul plate that enables a cap-to-blade bond without voids in the rotor blade refurbishment process.

In its eighth year, the summit has

evolved from a local discussion on engine issues into an aviation enterprise-wide AAAA national event with depot artisans engaged in discussions about cutting-edge production technologies, improvements, and achievements with Warfighters, program managers, original equipment manufacturers and contractors.

Local business people attended break-out sessions about depot business and contracting within the Department of Defense along with workshops on how to engage with CCAD.

U.S. Congressman Solomon P. Ortiz, 27th District of Texas, in his welcome on the final day praised the depot for all that it does for the servicemen and women in the fight, as well as for the local community.

This is the second year AAAA has sponsored the summit.

♦♦♦
Mr. Ed Mickley is the Public Affairs Officer for Corpus Christi Army Depot, Corpus Christi, TX.

TAIS continued from page 49

The other tactical ATC systems managed by PM ATC which provide enroute and terminal procedural control, tactical tower capabilities, and precision radar functions are leveraging the TAIS pathfinder work in order to create a tactical ATC network with all systems seamlessly sharing data and knowledge.

PM ATC is also working to provide situational awareness to aircraft in flight through the aerial layer network effort led by PM Aviation Systems.

The net-centric journey continues, but the objective is clearly in sight, and the TAIS supporting effort is helping to chart the course not only for Air Traffic Services and Army Battle Command, but also for Joint partners as well.

♦♦♦
Mr. James W. (Jim) Kelton, Lieutenant Colonel, U.S. Army (Retired), is a Department of the Army Civilian currently serving as the assistant product manager for the Tactical Airspace Integration System (APM TAIS), Office of the Product Manager for Air Traffic Control (PM ATC), Project Manager for Aviation Systems (PM AS), Program Executive Officer Aviation, Redstone Arsenal, AL.

Pakistan Flood Relief Operations

By MAJ Daniel Rice



A washed out bridge is seen along the Swat River from a Chinook helicopter with TF Raptor, 3rd Cbt. Avn. Bde., TF Falcon, as it heads to Kalam to drop off humanitarian assistance and pick up victims of the flood in the Khyber Pakhtunkhwa province, Pakistan, Aug. 9, 2010.

U.S. ARMY PHOTO BY SSG HORACE MURRAY

In the closing days of July 2010, the Swat Valley in northwestern Pakistan received roughly six months' worth of rain in a single 24 hour period, causing landslides and flooding that, along with rains in other portions of the country, covered nearly one fifth of the land mass of Pakistan.

In neighboring Afghanistan, Task Force Knighthawk (2nd Battalion, 3rd Combat Aviation Regiment) and TF Falcon were ordered to deploy in support of flood relief operations.

This is the story of TF Raptor and how it became the spearhead of the American effort to provide relief to the Swat Valley from the hundred-year flood that devastated the valley and much of the rest of Pakistan.

Planning the Mission

On August 2nd planners from Combined Joint Task Force-101 and I departed for Peshawar to finalize the plan for movement into Pakistan and operations supporting flood relief.

Ghazi Air Base exceeded our expectations and was an ideal location to receive the task force and stage our relief mission. We had exclusive use of a state of the art hangar that was more than spacious enough for the collection of equipment that almost immediately began to flow in on C-130s.

Our reception at Ghazi was made seamless through the efforts of the Office of Defense Representative-Pakistan and the Pakistani Army.



SGT Kristopher Perkins, a Chinook crew chief with Co. B, TF Raptor, 3rd Cbt. Avn. Bde., TF Falcon, holds a child in his lap after picking up 114 Pakistani victims during flood relief missions, Aug. 11, out of the Swat Valley, Pakistan.

U.S. ARMY PHOTO BY SGT MONICA K. SMITH



Pakistani civilians from the town of Kalam are gathered inside a U.S. Army Chinook with Co. B, TF Raptor, 3rd Cbt. Avn. Bde., TF Falcon, which brought in humanitarian assistance and pick up victims of the flood in Khyber Pakhtunkhwa province, Pakistan, Aug. 9.

U.S. ARMY PHOTO BY SSG HORACE MURRAY

It was clear they were going to great lengths to ensure our troops were both comfortable and effective with ample living and work spaces.

On August 4th, TF Raptor's four CH-47Ds and two UH-60Ls arrived

in concert with Soldiers via C-130.

After some initial introductions with the key players from both the U.S. and Pakistan military we got down to business. We pushed through the required flight briefings and moved to our aircraft at the earliest opportunity.

Unfortunately the weather did not cooperate.

The Initial Effort

August 5th was our first operational mission day, and it provided us with our first look at the devastation wrought by the flooding. In the place of a pristine and picturesque river valley was a 500-yard wide swath of destruction where virtually everything in its path had been swept away by a raging torrent that was continuing even as we began our operations.

Passage up or down this valley for any distance at all was possible only by helicopter. As in any mission, safety and security was of primary concern.

Our efforts were greatly facilitated by the Pakistani Army aviators who rode along as "safety pilots." These professionals quickly proved their worth to us many times over. They were very familiar with local terrain, flight rules, and weather patterns, and they understood Pakistani accents much better than we did.

We were also assisted by Pakistani Army commandos who provided security and crowd control on the helicopter landing zones and put a



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Pakistani military load a flood victim with a broken leg onto a Black Hawk with Co. A, TF Raptor, 3rd Cbt. Avn. Bde., TF Falcon, during flood relief missions, Aug. 9 in the Swat Valley, Pakistan.



The Soldiers of Task Force Raptor, 3rd Combat Aviation Brigade, Task Force Falcon, pose for a photo at Ghazi Air Base, Pakistan.

Pakistani face on relief operations.

The Pakistani Army established a staging and reception area in a large soccer field just south of the town of Kwaza Kela. It was here that refueling was conducted in conjunction with the staging of internally displaced persons (IDP).

By the end of the first day, TF Raptor had completed two lifts into and out of the Swat Valley. We had identified areas that we could immediately improve efficiency, and we were familiar with all current helicopter landing zones. We rescued 824 IDPs and transported 73,370 pounds of food and supplies into the valley on our first day.

Continuing Operations

Our initial success on August 5th was followed by three days of non-flyable weather with low ceilings, heavy rains, and poor visibility in the Swat Valley. We used this time to conduct a full FARP demonstration for the Pakistani Army leaders in the hangar. This allowed us to set up and fully inspect our equipment one more time.

The bad weather also allowed PAKMIL time to preposition fuel trucks at Rubicon prior to resuming flight operations. On the afternoon of August 9th the weather lifted and we were able to resume flight operations. After three days on the ground, we were eager to take full advantage of the break in the weather with the additional aircraft that were visiting from Bagram and TF Falcon.

Utilizing eight aircraft (3-UH-60/5-CH-47) including the two that the brigade commander, COL Donald R. Galli, had arrived in, we were able to extract

565 IDPs and transport 61,600 lbs of supplies into the valley in a single lift.

Over the next few days, the aircrew and support personnel experienced some of the most professionally challenging and personally rewarding missions of their careers.

Establishing the FARP at Rubicon cut the refuel turnaround time for the serials from up to 2 hours to approximately 3 minutes on Blackhawks and 15 minutes on Chinooks. This expanded our capacity tremendously and stoked the enthusiasm among the crews for the mission as they saw the impact we were having in terms of tons of materials delivered and hundreds of people rescued.

The challenge of forecasting the weather in that terrain along with the periodic heavy rains and low ceilings continued to cause problems. Two Chinooks were forced to remain on the ground and the Pakistani Military were gracious hosts to our crews and truly treated them as brothers in arms.

Relief Arrives

On August 12th, our relief consisting of USMC CH-53s from the 15th Marine Expeditionary Unit (MEU) began to arrive. TF Raptor pilots and 15th MEU pilots talked late into the night exchanging all the information learned over the past week. It was obvious that the Marines were eager to begin helping in the relief effort.

August 14th was TF Raptor's last day of flying relief into the Swat Valley. This day we were to fly four serials in the morning with the first two serials being mixed Chinook and Super Stallion aircraft.

Unfortunately, the first flight of Blackhawks was forced to return to base after encountering inclement weather only 25 miles west of Ghazi.

All weather forecasts were bleak, and it appeared that TF Raptor would be unable to conduct any more relief

missions. Fortunately by mid morning, the clouds began to break, and we received good weather reports from the valley that allowed us to scramble the fleet one last time. All four serials completed missions into the valley.

The UH-60s remained there all day, and on the final lift CASEVAC'd a young girl from a village 14 miles further north than we had ever traveled before. By day's end, we had transported an additional 457 IDPs to safety while providing another 99,000 lbs of food in the valley.

Wrap Up

During this ten day mission to assist the people of Pakistan, TF Raptor launched and recovered every assigned aircraft on each of the five flyable days.

At mission's end, the task force had rescued 3,571 isolated and hungry Pakistani citizens, delivered 448,140 pounds of food and supplies to the upper Swat Valley, and successfully transitioned the mission to follow on Marine forces.

Strategically, we undoubtedly accomplished more. TF Raptor demonstrated to the people of Pakistan and the rest of the world that the true heart of America is about helping those in need.

We took our creed to never leave a comrade behind and extended it to the relief of innocents in suffering. Our sincerity and dedication were not lost on our Pakistani friends. I personally hope that these bonds of friendship developed under such adverse conditions will be the lasting legacy of TF Raptor.



MAJ Daniel Rice is the Executive Officer of TF Knighthawk and 2nd Bn., 3rd Avn. Regt. (GSAB) and served as the Officer in Charge of TF Raptor during disaster relief operations in Pakistan and is currently deployed with 3rd Cbt. Avn. Bde. in support of Operation Enduring Freedom.

Ask The Flight Surgeon



Flying and Energy Drinks

By Dr. (MAJ) Nicole Powell-Dunford

Q: I love my energy drinks! I understand, however, that ginseng drinks are grounding. Is this correct? Also, do any potential grounding times for energy drinks come from Army regulation or are they just 'guidelines'?

FS: AR 40-8 states that all supplements, herbal and dietary aids and performance enhancers are prohibited unless cleared by the flight surgeon or aeromedical physician's assistant (APA) in consultation with applicable approved products lists (APLs). Currently, no energy drink has been specifically approved by the U.S. Army Aeromedical Activity (AAMA) for flight other than sports drinks which do not contain ephedra, creatine, ginseng or mega dose vitamins. Ginseng containing products, which include some versions of Monster® and Rock Star®, are grounding for 24 hours due to negative impact on blood clotting. Likewise mega-high doses of vitamins, found in several types of energy drinks, are not authorized. Fat soluble vitamins A, D, E and K in particular can accumulate in the body causing problems over time, even if well tolerated initially.

Monitor Caffeine Intake

For an individual who does not ingest caffeine regularly, it is prudent to ensure any beverage containing a lot of caffeine does not cause problems on the ground prior to consuming it before or during flight. Excessive caffeine intake can cause jitteriness, dehydration and heart palpitations, as well as a quickly filled bladder.

Xanthines and several other supplements have caffeine-like effects which may add up to a large dose in an unsuspecting consumer, especially if you are also consuming soda, chocolate or coffee in addition to an energy drink. Totally unregulated by the FDA, certain energy drinks may contain substances that are harmful as well as illegal.

Secret Ingredients = No Fly

Therefore energy drinks that contain unknown or secret ingredient compounds, such as the 'energy blends' in some versions of Rock Star, can never be endorsed for flight. Drinks containing extremely high levels of sugar may give you an initial boost in energy, only to cause a 'crash' later on as the body ramps up chemicals to drastically lower extremely high blood sugar levels. In addition, chronic use of high sugar beverages has been linked with a rash of dental problems in service members.

"12 Hours From Bottle to Throttle"

Lastly, some 'energy' drinks actually contain alcohol – mandating at least 12 hours flight restriction from last side effects to initial flight planning time. Caffeine use with alcohol does not in any way speed up your time for sobriety – it only makes you more wide awake for a potential DUI arrest if you are driving under the influence of such a beverage.

Questions about energy drinks are common because energy drink use itself is common, especially in deployed service members. Readily available at main forward operating base cafeterias, sold tax free at shopettes and shipped from overseas as care packages, it is estimated that hundreds of thousands of energy drinks are purchased and consumed annually throughout Iraq and Afghanistan by U.S. service members.

Moderation is Key

Moderate caffeine use in the short term is associated with benefits in vigilance and performance, yet high doses of caffeine are associated with caffeine dependence (setting you up for headaches and mood changes if you are unable to get your daily 'fix'), dehydration and abnormalities in heart rhythms.

Once habituated to a certain amount of caffeine, more and more is



PHOTO BY SGT. TRAVIS ZIELINSKI

News from the School House:

Do you have UAS operators within your ranks? All UAS physicals are now required to be centrally reviewed class IV flight physicals.

required for you to obtain the same effect. Chronic use of stimulants like caffeine may increase risk for depression and PTSD. Unsafe levels of fatigue, when inappropriately treated with excessive intake of energy drinks rather than with appropriate sleep restoration, can significantly contribute to accidents and fratricide.

When In Doubt, Check It Out

Due to the wide variety of energy drinks as well as the wide variety of reasons for their use, it is impossible to provide a comprehensive listing of appropriate flight restrictions for each beverage. Self ground for at least 24 hours when consuming a beverage with ginseng and never consume beverages with ephedra, mega dose fat soluble vitamins or unknown compounds.

When you are extremely fatigued, nothing can really substitute for sleep. Check with your flight surgeon prior to consuming your next energy drink!

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.

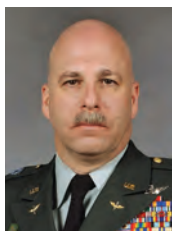
As always, fly safe!

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. (MAJ) Nicole Powell-Dunford is a flight surgeon and the director of the Army Flight Surgeon Primary Course at the U.S. Army School of Aviation Medicine at Fort Rucker, Ala.

AAAA Membership Update



Here's to Great Commanders, Battle Buddies, Barbers and Spouses

By CW5 Mark W. Grapin

Undoubtedly, I'll take some heat for the order of the title in this month's article. In some respects, the ire is welcome since it indicates more than just the *ArmyAviation* Editor reads it! And after an hour of ordering and re-ordering the title, I left it just as the words first fell onto the page.

For six years – minus a deployment and some schools – I commuted 570 miles each way to work; leaving my home in Northern Virginia, and arriving eight hours later in central Kentucky.

Although I had affiliated with the Kentucky National Guard in 2003, I had no clear plan for actually becoming a *Kentuckian*.

Every two-to-five weeks, I'd head home for a long weekend with just enough time to make sure I was still married and had not accumulated another tax deduction; then reverse the commute for the next week ahead.

Great commanders and great friends compel that level of loyalty. For nearly all of those six years, COL Benjamin F. Adams, III headed the Army Aviation program in the Kentucky Guard – arguably one of the best Aviation programs in the country.

I had known his Standardization Instructor Pilot (SP), CW5 Dean E. Stoops, as a professional acquaintance for several years prior and we had even worked on a couple of national-level projects together.

My one-year commitment quickly became two; then a deployment, then a third; and I had every reason to perpetuate my commute in my continued great fortune to work with and for such great people.

The concept for the Bluegrass Chapter of AAAA was devised either on a picnic table outside a Kuwait Airfield operations cell or on a C-17 somewhere over Iraq – depending on who you ask, and how the story is spun.

In any event, credit for the concept of forming a local Kentucky National

Guard-centric Chapter is always credited to COL Adams and my battle buddy Dean – one for the macro guidance and command emphasis, and the other for translating a brilliant commander's intent into tangible action.

Throw in the contagion of a half-dozen key players to actually get things going, and you can imagine my luck in having been on campus to help be a part of it all!

But the Crystal Ball's in Depot...

We were given rather long odds in being able to stand-up a local National Guard-centric chapter, not due to any organizational vindictiveness, but AAAA was in the process of undergoing tremendous change to encompass *ALL* of Army Aviation.

More than once, COL Adams reminded us that his Crystal Ball was out for depot-level maintenance, and much of his guidance was a best guess of how things would unfold in the months and years ahead.

Our Chapter goals were not always in direct line with that of the Association (for instance, conversion of the 1/30th rule for Aviation and Enlisted Career Incentive Pays for Reservists to full parity), and chapter funding was an early and chronic headache.

We had a seemingly huge backlog of people who deserved recognition for their support to and of Army Aviation; and every effort was made to shape our membership roster to reflect the community we're serving.

Two Aviation dining-outs and two welcome home ceremonies later and the Bluegrass Chapter was becoming as much a part of the fabric of Kentucky Guard Aviation as the *Unbridled Spirit* logos stenciled to our Black Hawk engine cowlings.

While the Bluegrass Chapter – and our Association as a whole – doesn't hinge on the will of a single person, it



Our Lady of Loreto is a companion award in the same family of the Order of St. Michael, presented to spouses for their excellence in service to the Army Aviation community. See the AAAA *InfoFile* for more information and forms.

is safe to say that *every* voice in our Association matters.

And, we have no idea from which batter the next home run will fly.

Associate and Sustaining Membership Revisited

Sometimes the loss of a single Soldier or aircrew can have such a significant impact on an organization as to knock the wind out of its sails.

The converse is just as true.

The Old Tucson chapter, for instance, is headed by a very charismatic senior NCO and it is the willingness of CSM Daniel J. Snyder to reinvigorate key aspects of his chapter membership that pays our Association in spades.

One such aspect of his ambition is to leverage the patriotic spirit common to those small businesses between Marana and Tucson, Arizona.

Even for those of us who must pay a finder's fee in the barber's chair – having failed to negotiate a volume discount for our thinning pates – our regular trips often result in the exchange of a great deal of information about who we are, and the circles in which we migrate.

What a great opportunity to suggest a Sustaining or Associate mem-

bership for Barber Bill or Scissors Sam! These small businesses – often sole proprietorships or limited partnerships – have suffered through national and regional economic woes with the rest of us. But for \$40 or \$75, one or two named members, respectively, are invited to join AAAA. Most merchants see this cost-of-a-dinner membership as a very inexpensive advertisement opportunity.

The local chapter celebrates the new member(s) at each of its meetings and gatherings, and the return-on-investment boost in business nearly always follows for the small business.

The National office follows-up each Associate or Sustaining membership application with a handsome folio, to include AAAA display logos and an embossed certificate suitable for framing; and many chapters take the extra measure of making a formal presentation of these certificates with a photo opportunity for our national magazine.

Most of those reading this article, however, would never consider approaching a merchant for their prospective membership – thinking it to be someone else's bidding.

But there is no line of volunteers at the membership window, and there is no MOS for talking to a barber – this simple query falls to each of us.

This month, if just *one* member from each chapter engaged just *one* merchant for their prospective membership, our corporate roster would grow by 69 in the blink of an eye.

The remuneration schedule for each Associate or Sustaining member to the chapters is more than that of an individual member, providing an even greater incentive to chat with your barber about more than how effective that comb-over is on the guy in the next chair.

That OSM Looks Great, but Something is Missing

Many of our best commanders and senior leaders are actually a package deal, playing to the moniker something to the effect of “...*behind every great Leader is a great spouse.*”

So many of our spouses quietly step up to the plate, supporting Army Aviation through their Family Readiness Groups and scores of other activities necessary to fulfill a larger picture of readiness.

Many of these activities garner little more than the occasional “thank

AAAA NEWS SPOTLIGHT



PHOTO BY LTC PAUL FANNING, JFHQAV

A UH-60 Blackhawk helicopter of the New York Army National Guard's 3rd Bn., 142nd Avn. in Latham, NY hovers above the Mohawk River as the crew fills the Firehawk firefighting system attached to the underside of the helicopter. A pump and hose system allows crews to refill the Firehawk tank in flight. The unit practices water bucket and Firehawk operations annually to ensure proficiency to support civil authorities fighting wild fires.

NYARNG Crews Train on Firehawk System

A New York Army National Guard UH-60 Blackhawk helicopter crew successfully tested the state's Firehawk firefighting system Wednesday, Aug. 4, in the Mohawk River near Colonie, NY. The Firehawk system consists of a 1,000-gallon tank and spray apparatus that fits beneath a Blackhawk helicopter and can be filled with a pump system and hose from a river or lake in 60 seconds. It is able to drop all or just part of its water payload and can also be filled with other types of fire-retardant material such as foam. The landing gear of the Blackhawk must be modified to accommodate the system. The training was part of the New York Army National Guard's annual preparation to respond to requests for assistance in fighting forest and brush fires from state and local officials. The Firehawk system has been in the New York National Guard's aviation inventory since 2004.

you” or a handshake while the leader in uniform is presented with an Order of St. Michael for their excellent service to Army Aviation as the spouse quietly claps their applause from a seat at the foot of the podium.

Too often these quiet services go unrecognized and unrewarded – yet many are a perfect fit for award of the Our Lady of Loreto (OLL).

These beautiful certificates and presentation pins have brought many tears to a surprised and unsuspecting spouse, and I'm amazed at how Spartan the roster of awardees remains after all these years.

Some chapters go to the extra measure of buying a modest silver necklace to accompany the pin, which is cast with both a secured pin clasp and a solid loop through which a necklace may be threaded.

And, in my humble opinion, the

OLL when presented as a necklace medallion is a great visual complement to the Order of St. Michael – both of which are draped around the neck.

I encourage each of our chapter leaders to keep an eye out for such opportunities, and to broaden our view and perspective of service to Army Aviation performed by our spouses, and the recognition it so richly deserves.

And so, here's to great commanders, battle buddies, barbers and spouses!

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
mark.grapin@quad-a.org

AAAA Spouses' Corner

My Best Advice – How One Spouse Handled Her Husband's Retirement

By Effie Martin-Nicke

My husband hasn't had a civilian job in twenty years. He enlisted in the United States Army directly from high school at the age of 17. He has served many positions along the way: infantryman, logistician, recruiter, air traffic controller, facility chief, ATC chief. All of these shaped his character to embrace and adapt to change but retirement is a complete game changer.

Not only is his suit shifting from green to blue, but his state of mind that has defined him for over 20 years has to be altered as well.

Here's what I have learned:

1. Don't ask "what if?" questions.

If you're a planner, like me, who needs to devise a plan for any and every possible outcome, just this once, *fly by the seat of your pants!*

Most soldiers are told when and where to go. They may be in a holding pattern but eventually they will be given an assignment.

Take this underlying certainty away, and the temporary unknown becomes terribly stressful. The constant questioning by you of possible "what if" scenarios and his inability to give any concrete answers will assuredly drive both of you insane.

2. Let him have alone time.

We don't have children at home, so it was much easier for us than for most families. My husband hunted every day until he was finally offered a job. I didn't question his method of stress relief. If sitting in the woods all day looking for something to kill helped him stay sane...fine.

I didn't take the shunning personally; I didn't call, nag or whine. He would come home eventually, tired and hungry. I invested in a few good books and watched my backlog of recorded shows.

3. Let him have control over more household decisions.

Spouses usually run the house

(plus our jobs, our children, etc). Our soldiers take care of other soldiers, equipment and the country. When they retire, that sense of authority dissipates. So why not let them have control over something at home.

Case in point: Sean bought a smoker for one of his many post retirement re-sparked passions: BBQ. He assembled and placed the smoker out back right next to the pool. I asked him to move it to the right about 10 feet; he gave me "the look".

Normally I would explain my thought process and defend my territorial decorative space, but instead I kissed him on the cheek and said, "It was just a suggestion: it's your call." Did I want the smoker blocking the pool? No. Does it really matter? No.

4. Don't discount his uneasiness with job hunting.

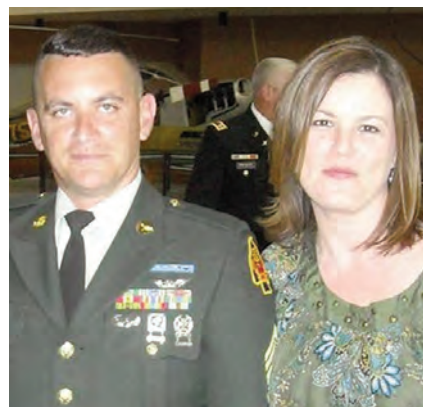
Of course when my husband first complained about resumes, interviews and starting all over again, I was tempted to say, "Well now you know how I feel every time we move!" Fight the urge! My husband had never had a professional interview. There were no questions geared towards self worth or the ability to self analyze. The Army is all about the team, not about self.

Of course he has delivered many presentations, but all of them covered a specialized topic, none of which had to verbalize his character. I directed him to a website that covered typical interview questions and which answers were acceptable. Needless to say, I learned the value of supportive silence.

5. Don't get excited about shopping for his new civilian work clothes.

This is not fun for the newly retired military. It will never be fun. I feel that this is stereotypical because some men like to shop, but this is very different.

Every time they try something on or buy a piece of clothing for "work", they are reminded that they will not be in uniform every day. Their uni-



Effie and Sean Nicke after his retirement ceremony, July 29, 2010 at the Aviation Museum, Fort Rucker, AL.

form tells everyone who they are, a United States Army Soldier. What does a pair of khaki's and a button down shirt say? The reminder of what they are leaving behind is a constant fire, and your enthusiasm over suits, shirts and tie choices is like dousing the flame with lighter fluid.

I hope someone finds these tips helpful in dealing with the craziness that undoubtedly ensues during retirement time.

In closing, I want to share some insightful comments from a retiree whom I met as a contractor working land expansion at Fort Irwin. I had a chance to meet many retired noncommissioned officers, warrant officers and officers from all military branches of the service.

One of the most memorable was a recently retired Marine Colonel. We were waiting for our meeting to begin, and we started discussing the large number of military retirees who work civilian military and contract positions.

He commented that most need to stay connected to this huge (20+ years) part of their life. Serving and defending this country defines who they are and what they believe. When I asked, "What was the hardest part of your transition?" he explained his personal hurdle. On active duty, his

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Aircraft photo provided courtesy of The Boeing Company

opinions mattered and his decisions were carried out. As a Civilian, his opinion was just one of many.

For more information about Army retirement, visit <http://www.armyg1.army.mil/rso>.

Having been an Army "Brat" and then Army wife for most of my adult life, I have some of my own thoughts about how to approach a military

retirement, and I am sure that many of our readers do too. If you would like to share some of your insights and suggestions, please send them to me and I'll pass them along in future columns. There truly is life after military retirement, and I thank Effie for her thoughts and contribution this month and wish her and her husband much success in their new endeavors. *Judy Konitzer*



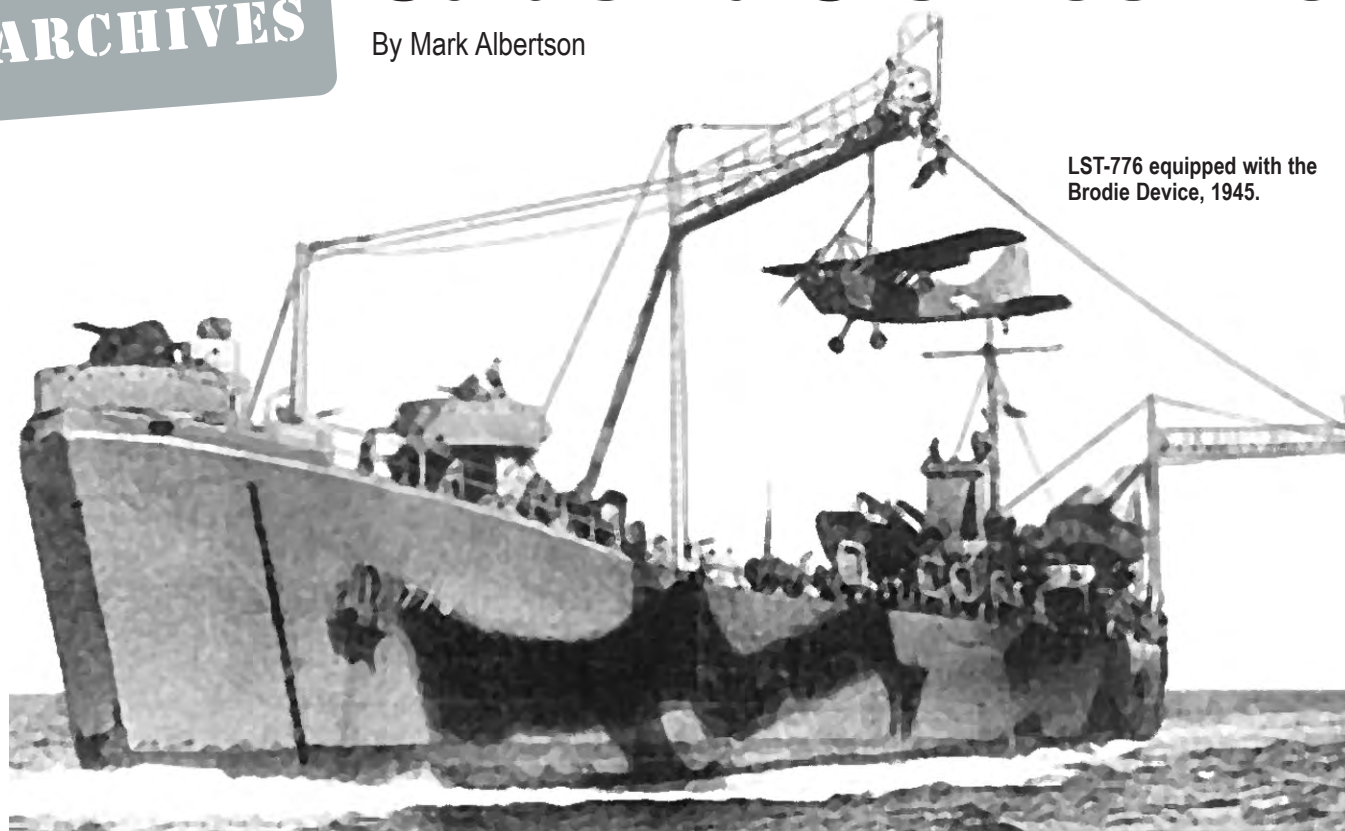
Effie Martin-Nicke, is an alumna of Tulane University and an instructor of Biology at Wallace Community College. She and her husband, Sean, currently reside in Enterprise, AL, but will be relocating to Huntsville, AL where they will be pursuing new careers.

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

**FROM THE
ARCHIVES**

Cub on a Clothesline

By Mark Albertson



LST-776 equipped with the Brodie Device, 1945.

PHOTOS COURTESY OF AEROFLEX.COM

In the waning days of World War II, a curious contraption appeared; a portable rigging for use aboard ship or ashore for takeoffs and landings. It was the result of a collaborative effort by the Army and Navy, devised and patented by CPT James H. Brodie of the USAAF Transport Corps. And it was called the Brodie Device.

AKA the Brodie System, this carriable runway was an improvement over the British Catapult Aircraft Merchantmen or CAM.

Introduced in 1941, CAM was a stop-gap effort to deter attacks on the Atlantic convoys by marauding Focke Wulf Condors. CAM featured a catapult-launched Hawker Hurricane or "Hurricat."

At the first sight of a Condor, a CAM-equipped freighter cast aloft its Hurricane to meet the threat. The drawback here was that the fighter was expendable. Upon completion of his mission, the pilot had to ditch in the open sea, hopefully to be picked up later.

Not so the Brodie Device. This effort in genius could not only launch aircraft, but retrieve them. Of course, CAM was designed for an 8,250 lb. single-engine



L-4 Cub suspended from the Brodie Device.

fighter; while the Brodie Device accommodated an observation plane grossing 2,000 pounds.

Brodie's invention was highly mobile. Including tools and equipment, transport weight was 7,000 pounds. Together with its nine-man crew, the Device could be transported by a pair of 2.5 ton Studebaker trucks; or by air, parachuted by C-47s into a jungle clearing.

In as little as twelve hours, the ground crew could have the Brodie Device assembled and ready to launch and receive aircraft.

Compare that to the days it took a team of Seebies with a bulldozer to build a landing strip or the months it took the Japanese to clear a patch of jungle using slave labor.

Brodie's contraption featured a pair of 65 foot tubular booms, each of which sprouted an arm fifty feet long. When shipped aboard an LST, one boom was mounted forward with the other raised aft. When in use, the arms were swung out to port.

The forward arm was angled at 10 o'clock with the after arm reading 8 o'clock. This was to allow for additional



PHOTO COURTESY OF AEROFILES.COM

Cub on a clothesline.

lift during takeoff. A 300 foot cable, strung like a clothesline, linked the arms.

Affixed to the after end of the cable was a trolley. Suspended from the trolley was an L-4 Piper Cub.

Takeoff commenced with the pilot revving the 65 hp Continental engine. Upon signal, the friction brake securing the Cub was released.

The L-4 hurried along the cable, gathering speed.

Beside the pilot hung a lanyard. The aviator grabbed hold and yanked. The hook atop the Cub slipped the stirrup dangling from the trolley. Freed of its restraint the L-4 dipped, its engine straining, as it clawed its way skyward.

Landings were even more of an adventure. The LST turned into the wind, working up to a speed of nine knots. The aviator made his approach from astern. He lined up the wallowing transport. His target was the trolley, which had been rolled aft. Affixed to the trolley was a 3x4 foot rectangular snare, designed to grab the hook atop the Cub.

The pilot made his approach, see-sawing the Cub's nose as he gauged the roll of the ship. The last thing the pilot needed was a fifty foot steel beam crashing down atop his plane.

The Cub floated in beneath the gently rolling arm. An abrupt tug told the pilot that the hook had bit into the snare. He kept the nose tilted downwards to prevent the prop from fouling the cable. He chopped the engine and the L-4 was quickly brought to a halt by the friction brake. The Cub was then gently lowered to the deck.

At first glance, the Brodie Device appeared to be little more than a carnival attraction, perhaps something that would have thrilled onlookers during the barmstormer days. Not so, according to Flight Officer Raymond A. Gregory. He made more than 300 takeoffs and landings using the Device. He observed that any competent aviator could master the Brodie System.

The Brodie Device first saw combat at Iwo Jima. LST 776 mounted the rig and carried six aircraft. The planes were Marine Corps OY types (L-5 Sentinels).

Five of the six planes were launched successfully. However, due to heavy seas, the L-5s were directed to conduct operations ashore.

LST-776 went into action again during the Okinawa Campaign. Army pilots from the 77th Infantry Division were assigned. The 77th was to take the Kerama Retto Islands, 20 miles south of Okinawa before the main campaign was to commence. The Grasshoppers lost nary a

plane or pilot during the entire operation. And in 20 take-offs and landings, the only damage incurred was to two propellers.

The Brodie Device appeared too late in the war to be effective. Only eight of 25 LSTs scheduled for conversion were so-equipped. The Office of Strategic Services considered CPT Brodie's invention. Plans called for the clandestine use of the Device in the China-Burma-India Theater. But again the war ended too soon and these plans were cancelled.

Brodie himself saw postwar commercial possibilities for his Device. Among the ideas floated was that of ranchers who could use the Device to scout outlying acreage; rural taxi services for commuters needing to get to the train depot or airport; or, priority transportation for mail or VIPs from ship to shore.

Brodie even envisioned improvements in the rig that would have allowed for the accommodation of aircraft of greater size and weight.

Unfortunately for the inventor his ideas never really took hold. With the conclusion of hostilities, no one it seemed had any further use for the Cub on a Clothesline.



Mark Albertson is a writer, researcher, speaker who has published articles on issues of history and current events in a number of newspapers and magazines for many years. An award winning historian, he is a contributing editor for Army Aviation magazine, providing a monthly "Art's Attic" column.

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The symposium will consist of individual and panel presentations with follow-on question and answer sessions. This year, the focus will be on acquisition, logistics, and technology challenges encountered by both the government and industry, as we sustain combat operations, modernize, and recover while reforming the acquisition process and reducing the budget. We will also have updates from the Commanding General, Aviation and Missile Command, the Commanding General,

Aviation Center of Excellence and the Program Executive Office, Aviation in addition to presentations by government, industry, and aviation field and aviation directorate key note speakers.

The Aviation Product Symposium will provide a unique opportunity for senior leaders from industry, military, and the government to interact and share their thoughts on the future of aviation logistics. The key objective of this year's symposium will be to build on last year's discussions on how industry and the government can work together to continue to maintain the current standard of Army aviation excellence during an extended period of wartime environment.

For information regarding the symposium, please contact Ms. Debi Charlier or Ms. Janice Sanders supporting the Tennessee Valley Chapter of the Army Aviation Association of America at (256) 464-9191, or via e-mail at janice.sanders@vt-group.com or debi.charlier@vt-group.com, or visit the Aviation Product Symposium website at www.aaatv.countmein.com.

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Industry News

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

Sikorsky Commits to Build X2 Technology™ Prototypes to Advance Military Rotary Wing Operations



PHOTO COURTESY OF SIKORSKY

Jeffrey Pino, president of Sikorsky Aircraft, unveiled a mockup of its next major project on Oct. 20, the S-97 Raider, light tactical helicopter with a pusher prop at the rear for greater speed. Sikorsky Aircraft announced it will design, build and fly two prototype light tactical helicopters as the follow-on advancement to the X2 Technology™ demonstrator aircraft that unofficially shattered the helicopter world speed record here in September with a flight speed of 250 knots (287 mph). The decision to continue development of the next-generation rotary wing technology will enable Sikorsky and select suppliers to offer the high speed X2 prototype vehicles for flight test and evaluation by U.S. armed forces. Like the X2 Technology demonstrator, the X2 Raider prototypes will feature twin coaxial counter-rotating main rotors (in place of one main rotor and a tail rotor) and a pusher propeller. For the armed reconnaissance mission, the X2 Raider helicopter will have space aft of the two-pilot cockpit for armament and auxiliary fuel. In an assault configuration, the cabin affords space to accommodate up to six troops. In addition to flying at nearly twice the speed of a conventional helicopter, the X2 Raider prototype aircraft will incorporate other key performance parameters critical to combat operations — increased maneuverability, greater endurance, and the ability to operate at high altitudes. Sikorsky will conduct its X2 Raider aircraft development program utilizing military standards. The company expects to conduct its first major program milestone — a preliminary design review — in 2011.

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

Boeing to Provide Apache Spare Main Rotors

Boeing announced on Oct. 5 that the U.S. Defense Logistics Agency Aviation has awarded the company a three-year contract to manufacture spare main rotor heads for the U.S. Army's fleet of Apache attack helicopters. The fixed price contract calls for an initial 100 main rotor heads, at a value of \$31 million, and allows for 50 additional rotor heads, which would increase the contract value to \$48 million.

Boeing CH-47F Engineering Effort

The Boeing Co., Ridley Park, PA, was awarded on Sept. 29 a \$11,999,984 cost-plus-fixed-fee contract. The purpose of this delivery order is to perform 57,700 hours of engineering services support of CH-47F Chinook helicopter non-recurring engineering to include integration of engineering change proposals, product improvement, and other modifications to the CH-47F cargo helicopter. Work is to be performed in Ridley Park, PA, with an estimated completion date of Sept. 30, 2012.

More Shadow Payloads from AAI

AAI Corp., Hunt Valley, MD, was awarded on Sept. 24 a \$70,715,213 contract for the purchase of 142 laser designator payloads and 61 bore sight tools in support of the Shadow unmanned aircraft system. Work is to be performed in Hunt Valley, MD, with an estimated completion date of Dec. 31, 2010.

UH-60 DECU Contract to BAE

BAE Control Systems, Fort Wayne, IN, was awarded on Sept. 27 a \$21,490,793 indefinite-delivery/indefinite-quantity contract. This contract is for Delivery Order 0001 for the overhaul of the UH-60 control unit, Superv, and input (DECU) is for the quantity of 300 each. The total dollar value of Delivery Order 0001 is \$1,361,650. Work is to be performed in Fort Wayne, with an estimated completion date of Sept. 30, 2015.

General Atomics Integration Effort for ERMP

General Atomics Aeronautical Systems, Poway, CA, was awarded on Sept. 28 a \$5,841,625 cost-plus-fixed-fee contract. This contract is for the issuance of Modification P00018 to contract W58RGZ-09-C-0136 for the extended range/multi-purpose sub-engineering services effort engineering and integration support, integrated logistics support, and program management. Work is to be performed in Poway, CA, with an estimated completion date of Sept. 30, 2011.

BAE Gets Doppler Contract

BAE Systems Information and Electronic Systems Integration, Wayne, NJ, was awarded on Sept. 24 a \$19,400,000 five-year indefinite-delivery/indefinite-quantity firm-fixed-price contract. This contract is to procure AN/ASN-157 Doppler navigation set (National Stock Number: 6605-01-323-9061) to support single engine helicopters. Work is to be performed in Totowa, NJ, with an estimated completion date of Sept. 29, 2013.

Two More CH-47F

The Boeing Co., Ridley Park, PA, was awarded on Sept. 30 a \$43,526,000 firm-fixed-price contract. The purpose of this contract modification is to exercise the option for two CH-47F new Chinook cargo helicopters. Work is to be performed in Ridley Park, PA, with an estimated completion date of Sept. 30, 2013.

Sikorsky to Deliver Three Blackhawks

Sikorsky Aircraft Corp., Stratford, CT, was awarded on Sept. 29 a \$37,822,935 firm-fixed-price contract. This procurement is for the exercise of an option to purchase two UH-60M aircraft and one HH-60M aircraft for the Army. Work is to be performed in Stratford, CT, with an estimated completion date of June 30, 2012.

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POTM

PEOPLE ON THE MOVE

CHANGE OF COMMAND

Wings of Lightning Brigade Welcomes Tate



COL Michael D. Lundy, outgoing commander, 25th Combat Aviation Brigade, passes the brigade Colors to MG Bernard S. Champoux, commander, 25th Infantry Division, during the "Wings of Lightning" Brigade change of command on Sills Field at Schofield Barracks, Oct. 21. Lundy relinquished command to **COL Frank W. Tate** during the ceremony.

O'Connor Takes the Reins at Lightning Horse Squadron



COL Michael D. Lundy (center), commander, 25th Combat Aviation Brigade (CAB), LTC Kenneth A. Hawley (front left), outgoing commander, 2nd Squadron, 6th Cavalry Regiment, 25th CAB, and **LTC Thomas O'Connor**, incoming commander, 2-6th Cav. Regt., take a moment of silence during the "Lightning Horse" Squadron's change of command on Sills Field at Schofield Barracks, Oct. 13.



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Hines Takes Over The Diamond Head Battalion



LTC Kelly Hines, incoming commander, 2nd Battalion, 25th Aviation Regiment, 25th Combat Aviation Brigade (CAB)(center left) accepts the battalion colors from COL Michael D. Lundy, commander, 25th CAB, as he assumed command of the "Diamond Head" Battalion from LTC David J. Francis on Sills Field at Schofield Barracks, Oct. 14.

Robinson Assumes Command of Hammerhead



COL Michael D. Lundy (center), commander, 25th Combat Aviation Brigade (CAB), LTC Gregory A. Baker (left), outgoing commander, 3rd Bn. (GSAB), 25th CAB, and **LTC Lori L. Robinson**, incoming commander, salute during the "Hammerhead" Battalion's change of command on Sills Field at Schofield Barracks, Oct. 19.

AWARDS

Shadow TUAS Team Recognized



The 2010 Secretary of Defense Performance-Based Logistics (PBL) System Level Gerald R. Beck Award was presented to the U.S. Army Shadow Tactical Unmanned Aircraft System along with government contract teammate AAI

Corp in a ceremony on Oct. 13, 2010 in Hilton Head, SC. PBL is the Department of Defense strategy to improve weapon system readiness by obtaining life cycle product support of weapon systems, sub-systems, and components. The Shadow TUAS has flown over 500,000 operational hours of which over 90% have been flown in combat. Pictured from the left are: Todd Osteller, Tactical UAS Director Plans & New Programs, AAI; Ron Smith, Chief, System Support Division UAS Project Office; Joe Cerreta, BIT/NET & GOCO Program Manager, AAI; LTC Andrew Hamilton, Product Manager for Ground Maneuvers, UAS Project Office; Russ Walker, Division Vice President TUAS Programs, AAI; Randy Pilling, Division VP TUAS PBL Programs, AAI; Linda Scott, Material Requirements & Support Sr. Program Manager, AAI; and Darrell Presley, Fielded Systems Program Manager, AAI.

4th CAB Soldiers Earn Marksmanship Award



SFC Frederick Klontz, the senior intelligence sergeant of the 4th Combat Aviation Brigade, receives his German "Shützenschnur" marksmanship badge at Camp Marmal, Afghanistan, Sept. 29. American and German soldiers stationed at Camp Marmal, Afghanistan received each other's national marksmanship badges after qualifying with different weapon systems. 49 Soldiers and two Airmen with the 4th CAB qualified with German weapons to earn that country's highest marksmanship award. The 4th CAB Soldiers take advantage of their close proximity with the multinational battle forces by cross-training weapons and vehicles to become more tactically proficient.

Halloween in Iraq



SPC Wendy Rodriguez, a Soldier serving in Iraq with the Combat Aviation Brigade, 1st Infantry Division, poses for a photo during a Halloween party at Camp Taji, Iraq, Oct. 31.

POTM

PEOPLE ON THE MOVE

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, Ala. AAAA provides standard aviator wings to all graduates and sterling silver aviator wings to the distinguished graduates of each flight class.

32 Officers, October 13

AH-64D Track

LT Cody A. Anfinson
LT William P. Kline
LT Bobby G. Parker III *
WO1 Rawle M. Roberts

UH-60 Track

LT Andrew K. Camponelli - DG
WO1 Rian A. Lockwood - DG
WO1 Jason W. Alexander - HG
CW2 Christopher N. Hise - HG
WO1 Benjamin G. Vehslage * - HG
WO1 Lucas S. Amundson
WO1 Luke C. Anderson
LT Amanda C. Beene
WO1 Cory M. Bischof
LT Joshua Brown
WO1 Patrick S. Brum
WO1 Andrew B. Cordray
WO1 Jonas G. Courneya
WO1 Patrick M. Devlin
WO1 Jesse M. Futrell
LT Gregory E. Gallerizzo
LT Daniel B. Hunsicker
WO1 Jake S. Idzerda

WO1 Mark P. Jordan
LT Andrew M. Nicoletti
WO1 Jason A. Rhynard
LT Matthew G. Ritchie
LT Lindsay C. Roberts
WO1 Steven A. Rushin
WO1 Travis W. Schaub
WO1 Erik Simmler
WO1 Christopher J. Sprigg
WO1 Matthew A. Tanner

55 Officers, October 27

AH-64D Track

LT John W. Buchanan - DG
LT Kurt W. Cooper - HG
WO1 Stephen B. Rimmer - HG
WO1 Kenneth A. Watson - HG

LT Jason M. Antanovich
LT John R. Brainard
LT Randall B. Chasten
LT John H. Freeman
WO1 Joshua M. Harris
WO1 Jason A. Henke
LT Victor A. Kareh
LT James A. Kistler
LT Christopher D. Landers
LT Jeremy G. Larson
LT Luke N. Mole
LT Bradford F. Ritzel +
WO1 Marvin J. Rosario
WO1 Adam M. Saunders
WO1 Steven J. Spencer
WO1 Christopher A. Webb

OH-58D/R Track

LT Jennifer M. Croslow * - DG
CW2 Matthew S. Humphrey - DG
WO1 Paul S. Laser * - HG

WO1 Grant J. Black *
LT Tatiano R. Blanc
WO1 Kenneth Cloud II
WO1 Neil F. Hardin
WO1 Jeffrey T. Johnson
LT Matthew C. Litvinas
LT Anne M. Montgomery
WO1 Aaron H. Montgomery
WO1 James L. Peterson
WO1 Michael J. Tolsma
CW2 Andrew J. Wilson *

UH-60 Track

WO1 Brian C. McCormick * - DG
WO1 Marc A. Cohen - HG
LT William C. Crowe - HG
WO1 Daniel J. Laven - HG
LT Zachary J. Smith - HG
WO1 Christopher Aviles
WO1 Kyle B. Baker
WO1 Kristin S. Blumberg
WO1 Joel F. Bowling
LT Jeffrey I. Davis
WO1 Thomas L. Fields
LT Robert D. Ghabel *
LT Jeffrey R. Hodish
LT Mandi M. Inglsbee
WO1 Christopher R. Jaros
WO1 Paul W. Kelley III
WO1 Logan R. Miller
LT Dustin Petersen
CPT Brian J. Rager
WO1 Jeremiah W. Russell
WO1 Chase S. Ward

UAS Operator Graduates

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

Shadow

Class: 10-021

19 Graduates, October 7, 2010

SPC Krystal L. Henderson - HG
PFC Ryan M. Carr

CPL Nathanael P. Coopridge
SPC Robert D. Crow
PV2 Tyler J. Gardiner
PV2 Cody L. Griffin
SPC Brandon M. Grogan
PV2 Anthony V. Hartman
PFC Ivan N. Hurley
PFC Sergio Roman II
SGT Christopher M. Lee
PFC Michael A. McGraw
PFC David A. Mesa
SPC James A. Oller
PV2 Chyrelle D. Palumbo
PV2 Joseph N. Patton
PV2 Jedidiah D. Prall
SPC Matthew A. Thwaites
PFC James R. Winstead

Shadow

Class: 10-022

19 Graduates, October 7, 2010

PFC Glenn A. Kiefer - HG
PV2 Jack D. Barrow
PV2 John F. Bidlespacher
SPC Donald R. Broadus
PFC Nikis A. Castelazo
SPC Justin B. Connor
SPC Joshua D. Curtis
PV2 Nolan Guardado
PV2 Justin B. Johnston
PV2 Gregory D. Kissiar
PV2 Brandon L. Lopez
PV2 Nicholas J. Martin
PFC Kiel A. McDiffett
PV2 Joshua W. Montgomery
PFC Benjamin J. Norwood
SPC Adam C. Paulsen
PV2 Joel F. Preston
PFC Zachary J. Reeder
PV2 Chase P. Wollen

DG = Distinguished Graduate

HG = Honor Graduate

* = AAAA Member

+ = Life Member

UPCOMING EVENTS

DECEMBER 2010

Dec 13-15 AAAA Unmanned Aircraft Systems (UAS) Professional Forum, Arlington, VA

JANUARY 2011

Jan 1 AAAA National Awards Nominations Deadline
Jan 12-14 AUSA Aviation Symposium & Exhibition, National Harbor, MD
Jan 21 AAAA Scholarship Executive Committee Meeting, NRG, Arlington, VA
Jan 22 AAAA National Awards Committee Meeting, NRG, Arlington, VA
Jan 31-Feb 4 Aviation Senior Leaders Conference, Fort Rucker, AL

FEBRUARY 2011

Feb 9-10 Joseph P. Cribbins Aviation Product Symposium, Huntsville, AL
Feb 22-25 AUSA Winter Symposium, Fort Lauderdale, FL

APRIL 2011

Apr 17-20 AAAA Annual Professional Forum and Exposition, Gaylord Opryland, Nashville, TN

ARMY AVIATION

UPCOMING SPECIAL FOCUS:



December

- Industry Support and Challenges
- Industry Partners Directory



January

- Aviation Product Support
- Arming the Force

Contact: **Bob Lachowski**

Advertising Director Tel: (203) 268-2450 x 131

E-mail: bob@quad-a.org

AAAA News

AAAA Chapter News

Arizona Chapter



Members of the Arizona Chapter of AAAA held their annual Dimmery-Koch Scholarship Classic at the Longbow Golf Course October 4th in Mesa, Ariz. Presenting the coveted "Yoda" Trophy to the winning team is Jeff Koch (second from right), son of Joe Koch. The winning foursome is (left to right): **COL (Ret.) Bill Elder**, **Terry Dimmery** (brother of Hugh Dimmery), **Eric Dimmery** (son of Hugh Dimmery), and **BG (Ret.) Mike Burke** (right) president of the Arizona Chapter. The scholarships are named posthumously in honor of Hugh Dimmery and Joe Koch, career Army Aviators and valued Boeing employees.

Morning Calm Chapter



COL James T. Barker, the 2nd Combat Aviation Brigade commander and president of the Morning Calm AAAA Chapter receives a plaque of appreciation from Governor Kim Moon-Soo, Kyeonggi Province in Republic of Korea. The plaque was presented in recognition and appreciation of outstanding support with an AH-64D static display during the Kyeonggi Province Security and Disaster Equipment Display held from August 16-19, 2010.

North Country Chapter



Soldiers and family members of the 10th Combat Aviation Brigade gather at Wheeler-Sack Army Airfield, Fort Drum, NY for "Fall Festival" on Sept. 18, 2010. The brigade-wide

organizational day featured a variety of events and activities to include a 5K fun run, sumo wrestling, bounce houses, a tug-of-war and a chili cook-off and petting zoo.

Tennessee Valley Chapter



AAAA TVC President Gary Nenninger (left) presents **MG James R. Myles** with a Soldier's commemorative shadow box at a retirement dinner on 9 September 2010 at the Von Braun Center in Huntsville, AL. Myles was recognized for his career long contributions to Aviation Soldiers and their families and his support of the Tennessee Valley Chapter. He will retire after 36 years of service and lives with his wife, Alice, in Huntsville.



Members of the Tennessee Valley Chapter Executive Board, (front row center to right) **MAJ James "Tory" Burgess**, **CSM (Ret) Leon Hite**, and **COL Neil Thurgood**, accept a 101st Airborne Division (Air Assault) flag at the Embassy Suites in Huntsville, AL on Sept. 19, 2010. Approximately 50 spouses and family members from the 101st Aviation Brigade, Fort Campbell, KY participated in a weekend retreat as part of *Strong Bonds*, an Army Chaplain's program that assists spouses of deployed Soldiers through family readiness training, relationship building and providing overall support to Army families. The national Army Aviation Association of America assisted in funding for this event with local TVC members hosting and helping as part of "taking care of Aviation Soldiers and their families."

Order Of St. Michael and Our Lady Of Loreto Awards

Arizona Chapter



Mr. Al Winn (right), Vice President of Apache Programs for The Boeing Company receives the Gold Order of Saint Michael award from BG (Ret.) Rodney Wolfe at his retirement ceremony August 25th in Mesa, Ariz. Mr. Winn retired after more than 40 years of service to Army Aviation, initially as DA civilian flight test engineer at Edwards AFB and culminating in his leading all aspects of the design, development and production of the AH-64D Apache and the AH-6 Light Attack / Reconnaissance Helicopter for the last ten years. Shown with him here applauding is his wife, and Head Cheerleader for the Apache Program, Kathleen.

Colonial Virginia



Mr. John L. Shipley, U.S. Army Aviation and Missile Life Cycle Management Command (AMCOM) director of special programs, aviation, is inducted into the Gold Order of St. Michael by LTG John F. Mulholland, commanding general, U.S. Army Special Operations Command (USASOC), Fort Bragg, NC during a ceremony on Oct. 20, 2010 at Fort Eustis, VA. Shipley was recognized for his continuous outstanding contributions to the U.S. Army and its Special Operations Forces during his 50 years of dedicated service to our nation.

OSMs Continued on page 68

AAAA News

BUSY LAME-DUCK

On Sept. 30 Congress approved a continuing resolution that was signed by the president later that day to run the government through Dec. 3 at 2009 funding levels. The members then departed on recess with a third of the Senate and the entire House preparing for the Nov. 2 national election. The whole Congress is expected to begin the lame-duck session on Nov. 15; the new 112th Congress is to form in Jan.

Members have many daunting tasks to accomplish, including nullifying the 21.5 percent cut of reimbursements for Medicare doctors (Doc Fix) by Dec. 1, extending the CR beyond Dec. 3 as needed, completing the 12 appropriations bills, voting the fate of the Bush era tax cuts in preparation for 2011 and acting on the Dec. 1 Commission on Fiscal Responsibility and Reform report.

Pundits believe that with the election results, many of these and other tasks will be left for the new Congress. The TMC maintains that the Defense bills should be approved promptly to support our troops at war.

NDAAs STATUS

While the National Defense Authorization Act was passed by the House, the Senate on Sept. 21, after failing to achieve cloture by a vote of 56-43 in late Sept. to limit debate on the Senate Armed Services Committee version along with 300 amendments, shifted its interest to completing the continuing resolution before Oct.

Among the amendments are a few that are controversial. They include "Don't Ask, Don't Tell", directing abortions to be performed in overseas military hospitals, the Dream Act that offers citizenship to immigrants either going to college or into the military, and Senate rules concerning holds on confirmations.

The TMC hopes that many of the other amendments which are supported by the TMC and both chambers will be adopted.

Pundits are concerned that the bill will be left for the new Congress and treated arbitrarily as part of a large omnibus bill.

TIME FOR A BIENNIAL BUDGET?

The notion of adopting a two-year budget to replace the often delayed annual budget process is gaining support in the Senate and the White House. Neither chamber held floor votes on budget resolutions to set 2011 spending caps nor deficit management plans; this is the first time a budget was not brought to the floor since the rules were enacted in 1974. None of the 12 appropriations were provided to the president for approval by the end of Sept.

On Sept. 20 Jacob Lew, during his confirmation hearing to be the White House budget director, affirmed he backs biennial budgets based on his experience in the Clinton administration. With the 2009 approval of advance funding for beyond 2010 to support uninterrupted care by the Department of Veterans Affairs in spite of late appropriations, the idea of a two-year budget seems more credible this time.



LEGISLATIVE REPORT

COL Curtis J. Herrick (Ret.)

AAAA Representative to The Military Coalition (TMC)

SECDEF TO RETIRE NEXT YEAR

In Aug., Sec. Robert M. Gates, the defense secretary since 2006, announced his intent to retire in 2011. As a Republican holdover he agreed at the request of Pres. Obama to maintain stability during the time of two wars. The remaining period will allow him to oversee the major surge underway in Afghanistan and to implement his plans to reallocate \$100 B within the DoD during the next 5 years, streamline the bureaucracy, and tighten efficiencies.

NEW AGENT ORANGE LINKS STAND

On Sept. 23 Veterans Affairs Secretary Eric Shinseki testified before the Senate Veterans Affairs Committee defending his decision in response to the law to grant the expensive automatic benefits, \$64 billion over a decade, for additional diseases which are scientifically linked with Agent Orange. He said strong evidence from 6 of 9 rigorous studies more than satisfied associations between the herbicide and ischemic heart disease, Parkinson's disease and chronic lymphatic leukemia. The law was reported to allow no discretion to weigh costs or other considerations. Benefits are to begin on Nov. 1 based upon the application particulars of individuals.

Although most Senators supported the plan, several raised concerns about covering common diseases without considering the financial obligations of these decisions and suggested that the law be revisited.

MOVE ACT VIOLATIONS

Justice Department is suing and seeking remedies from states that failed to mail absentee ballots 45 days before the Nov. 2 election in accordance to the 2009 Military Overseas Voter Enforcement Act, in response to Sen. John Cornyn (R-TX) who authored the act, the urging of the TMC organizations and others.

The non-conforming states are being required to process absentee votes in a manner that will allow valid votes to be counted that in some cases may arrive in specified grace periods.

CONGRESSIONAL SUPPORT RECOGNIZED

On Sept. 29 the TMC presented its highest award, the TMC Award of Merit, to legislators and recognized congressional staff who championed legislative improvements for military families.

The Senate Veterans Affairs Committee Chairman, Daniel K. Akaka (D-HI), was recognized for his leadership in enacting legislation supporting caregivers of wounded warriors and female veterans and for sponsoring legislation

to improve the post-9/11 GI Bill.

The House Armed Services Committee Chairman, Ike Skelton (D-MO), was honored for his leadership in supporting military pay comparability, military health care, wounded warrior improvements and efforts to reduce compensation inequities of disabled retirees and military survivors.

The TMC's annual Freedom Award was presented to Ms. Kim Lipsky, deputy staff director for the Senate Veterans Affairs Committee and Mr. Jacob Parker, Legislative assistant for Rep. Tom Latham (R-IA), for their support to military and veterans quality of life programs from behind the scenes.

STOLEN VALOR ACT APPEALS

The Justice Department is seeking to retain a federal law that makes it illegal to lie about being a war hero by appealing two federal court decisions that maintain that the statute is an unconstitutional muzzle of free speech. One case is with the full 9th Circuit Court in California and the other is with the 10th Circuit in Colorado.

VET BENEFITS BILL BECAME LAW

Hours before the Sept. 29 adjournment, Congress passed a comprehensive Veteran's benefits bill (H.R. 3219) upgrading many items in insurance, disability programs, burial benefits, and other VA programs.

For the Reserve Components families the bill permits suing over violations of the Servicemembers' Civil Relief Act (SCRA) and strengthens SCRA protections for home and vehicle leases and property sold while deployed to war. Additionally, the Uniformed Services Employment and Reemployment Rights Act has been strengthened clarifying the prohibition against wage discrimination.

Examples of other VA benefit upgrades include: increase in the VA mortgage loan guarantee to \$150,000 on Oct. 1, 2011, and to \$200,000 on Jan. 1, 2012; allowing an additional VA "aid and attendance" payment for veterans with severe traumatic brain injuries; and permitting parents of certain deceased veterans with no spouse or children to be buried in a national cemetery alongside the veteran.

The bill also requires a comprehensive study of best treatment practices for "chronic multi-symptom illness" in Gulf War I veterans and, separately, a study of medical issues of veterans of Post 9/11 conflicts.

NO COLA

2010 inflation has not been adequate to support a 2011 cost of living allowance adjustment.

AAAA: Supporting the U.S. Army Aviation Soldier and Family

IN MEMORIAM

Father Of Army National Guard Aviation Passes

COL John J. Stanko Jr., beloved Father of Army National Guard (ARNG) Aviation and Safety passed away Friday, October 8th in Danville, PA. He was 88.

An ardent advocate and leader of ARNG Aviation, he joined the National Guard in 1954 at a time when the aviation program was without a central focus. He brought with him an insightful background founded on hard work and a fortitude most of his depression era generation possessed, that of tenacity and self engineered efficiency.

His foresight in years to come would see Guard Aviation advance from meager hand-me-down systems to that of a partner of equality with the Active Component.

During his tenure as head of the new Aviation Logistics Center and later as Chief, ARNG Aviation Division for 16 years, his hand was on every major structural implementation of today's modern ARNG. These include: creation of four Army National Guard Aviation Training sites (AATS) which today conduct state of the art training in variations of all rotary and fixed-wing aircraft in the Army inventory.

He developed the missions of four Aviation Classification Repair Activity Depots (AVCRADs) which led to the stateside intermediate and limited depot support of ARNG facilities and current rotational deployments of the AVCRADs in support of combat operations in Southwest Asia. He was responsible for the overall safety program of the ARNG but he was most proud of his accomplishments in Aviation Safety.

His aviation story began while walking with a roommate in front of a Western Auto store in Newark, NJ in Dec. 1941 when he heard about the bombing of Pearl Harbor from a radio being broadcast to the sidewalk. He enlisted in the Army Aviation Cadet program in 1942 and was commissioned a second lieutenant and rated as a pilot in the Army Air Corps in 1944. He served as an aircraft commander on B-24 Liberators during World War II.

Leaving active duty in 1945, he majored in Industrial Engineering, Business Management at the Universities of Lehigh and Maryland and graduate studies at Penn State.

In the Guard, he was a dual rated Master Army Aviator, instructor pilot and an instrument examiner in fixed and rotary wing aircraft.



PHOTOS CONTRIBUTED BY DEL HARDMAN & JONES EISENHART

In recognition of his many accomplishments, he was inducted into the Army Aviation Hall of Fame in 1983.

A former AAAA National VP and Treasurer, he continued serving as a Member-at-Large-Emeritus and, for over 25 years, as a Governor of the AAAA Scholarship Foundation Board until his death.

A memorial service, with full military honors, was held in his hometown, Danville, PA on Oct. 30, 2010.

The AAAA National Executive Board voted to name the existing AAAA ARNG Unit of the Year Award The Col John J. Stanko ARNG Unit of the Year Award at its October meeting in Washington D.C.

AAAA National Awards

- Outstanding Aviation Unit Award
- Rodney J. T. Yano Non-Commissioned Officer of The Year Award
- The Robert M. Leich Award
- Aviation Soldier of The Year Award
- James H. McClellan Aviation Safety Award
- Active Aviation Unit of The Year Award
- John J. Stanko ARNG Aviation Unit Award
- USAR Aviation Unit Award
- Michael J. Novosel Aviator of The Year Award
- Joseph P. Cribbins DAC of The Year Award
- Henry Q. Dunn Crew Chief of The Year Award

Deadline for Nominations - Jan. 1, 2011

Awards will be presented at the 2011 AAAA Annual Professional Forum & Exposition in Nashville, TN, April 14-17, 2011

Nomination Forms
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at 203 268-2450



Send in Your Nominee Today!

AAA News



ORDER OF SAINT MICHAEL RECIPIENTS

BRONZE

CW4 Keith A. Lynch
 CW4 Jerry D. Hollars
 CW4 Gordon J. Cimoli
 COL Steven M. Mahoney
 CW4 Dirk E. Slack
 CW3 Gary W. Shulenberg
 CW3 Richard G. Adams
 MAJ Anthony Daniels
 LTC Timothy J. Burke
 CW5 O. Kip Rummel
 MAJ Thomas M. Ballenger III
 MAJ Gregory S. Fortier
 MSG James R. Laverty
 LTC Brandford L. Snowden
 SGM Minh D. Sutton
 LTC James A. Duncan
 BG Kurt Fuller
 CW4 Scott A. Pleake
 1SG Eddie D. Grinie
 COL Perry E. Barth
 CW4 Thomas A. Cook
 MG James A. Cozine, Ret.
 CW3 Christopher D. Hunt
 CPT Johnjesse Mahon
 CW4 Dennise E. Quincey
 CW4 Kurt Gruner
 MAJ Scott P. Nicholas
 MSG Robert Roark
 CW4 David William Sullivan
 CW4 Glen Edward Webb
 CW5 Daniel S. Hempe
 SFC Jason W. Sheer
 LTC Bart M. Diaz
 CW4 Ian S. Ballard
 SFC Gregory P. Sinder
 MAJ Craig J. Dupuy
 Dave P. Banquer
 MAJ Thomas J. Barrett
 LTC Erskine R. Bentley
 MAJ Robert K. Bryant
 MAJ Richard R. Coyle
 MAJ John R. Doeller
 CW4 Thomas F. Gross
 MAJ Joshua P. Higgins
 CSM Keith Hunter
 CW4 Robert S. Jackson
 CW4 William H. Keith, Jr.
 LTC Thomas E. Lewis
 CW4 Stephen M. Lodge
 CSM Osvaldo Martell
 LTC John A. McAfee
 CW4 Darren J. Monroe
 MAJ Thomas C. Petty
 CSM Harold Plattenberg
 MAJ Jeffrey A. Poquette
 CSM Ronald R. Rainge
 CSM Jesus Ruiz
 CW4 Eugene A. Santos

MAJ Jeremiah J. Simpson
 SGM Timothy R. Wagley
 1SG Andrew P. Manuel

NEW CHAPTER OFFICERS

Aloha Chapter
 COL Frank Tate, President

Iron Mike Chapter
 COL TJ Jamison, President;
 LTC Darryl Gerow, VP
 Membership; CSM Larry
 Farmer, VP Enlisted Affairs

Keystone Chapter
 COL Larie J. Wilson,
 President

Morning Calm Chapter
 MAJ Darren Buss, Treasurer

Prairie Soldier Chapter
 LTC Richard A. Gray, President

Winged Warriors Chapter
 LTC James G. Kanicki,
 President

DISTINGUISHED INSTRUCTOR
 SSG Samuel Ofarril
 Oct. 2009-Sept. 2010
Colonial Virginia
 GS-09 Robert E. Dorsey
 Oct. 2009-Sept. 2010
Colonial Virginia

SOLDIER OF THE MONTH
 SPC Charlene Hampton
 September 2010
Jimmy Doolittle Chapter
 SPC Adam R. Vidal
 August 2010
Jimmy Doolittle Chapter

SOLDIER OF THE YEAR
 SPC Jeremy S. Corley
 FY 2010
Savannah Chapter

NCO OF THE YEAR
 SGT Aaron L. Butterfield
 FY 2010
Savannah Chapter

NEW LIFETIME MEMBERS
 Robert Beaulieu
 Jim Bennett
 CW2 Peter L. Bianchi
 CPT Ashlie I. Christian
 CW3 James Connes
 COL Joseph A. Fucci, Ret.
 CW5 William M. Kelly
 LTC Keith A. Lenhard, Ret.
 SGM J.T. Luckie
 LTC Joseph C. Matthew
 Sharon Stanko
 MAJ Melville Charles Wilson Jr.

NEW INDUSTRY MEMBERS
 Ace Electronics
 Gabriel Group, Inc.
 Little Giant Ladder Systems
 Sentient Vision Systems
 Tighitco, Inc.

OSMs Continued from page 64

Morning Calm Chapter



The Bronze Order of St. Michael is awarded to **CW5 Ronald J. McKinstry**, 8th Army Standardization Officer, by 4th Bn., 2nd Avn. Regt. commander, LTC Thomas G. Rowell on Sept. 17, 2010 at Camp Humphreys, Republic of Korea. McKinstry was recognized for his outstanding achievement as gunnery instructor pilot, platoon leader and master gunner for the battalion and over 20 years of service as an AH-64 Apache pilot on the occasion of his permanent change of station. He will attend the Warrant Officer Senior Staff Course enroute to his next assignment with TRADOC Capabilities Manager, Unmanned Aircraft Systems, Fort Rucker, AL.

Savannah Chapter



Airfield, Afghanistan on 14 October 2010 on the occasion of the unit's impending redeployment. Pictured from the left: Galli, **CW4 Guy Davis** (Safety/Standzn. OIC), **CW3 Steven Dermer** (Apache pilot), **1SG Bryan Bell**, **1SG Mark Carl**, **1SG Kenneth Clary**, **1SG Jorge Hernandez**, **SFC Jeffrey Jones** (maintenance platoon sergeant), and Stidley. All were recognized for their outstanding service to Army Aviation during the deployment and Jones was further recognized on the occasion of his retirement after 23 years of exemplary service.



1SG Barry Merchant, Task Force Lighthorse, 3rd Cbt. Avn. Bde. was presented a Bronze Order of St. Michael by squadron commander and command sergeant major, LTC Thomas von Eschenbach, CSM Richard Lemke, and headquarters and headquarters company commander, CPT Anthony Marston during a ceremony Oct. 13th, 2010 at Jalalabad Airfield, Afghanistan. Merchant was recognized for more than 24 years of dedicated service to Army Aviation and the Nation on the occasion of the unit's impending redeployment.



1SG Danvis D. Bryan, headquarters and headquarters company, and **1SG Jerry M. Cowart Jr.**, company D, both with Task Force Viper, 3rd Cbt. Avn. Bde., receive the Bronze Order of St. Michael during a ceremony on Oct. 22, 2010 at Bagram Airfield, Afghanistan. Presenting the awards are COL Donald N. Galli and CSM Richard D. Stidley, 3rd CAB commander and command sergeant major. Bryan and Cowart were each recognized on the occasion of the unit's redeployment for 18 years of dedicated service to Army aviation.

AAAA: Supporting the U.S. Army Aviation Soldier and Family

Tennessee Valley Chapter



MG Genaro J. Dellarocco, outgoing Program Executive Officer, Missiles and Space, is presented with the new Knight of the Order of St. Michael award during a ceremony Oct. 6, 2010 at the Redstone Officer and Civilian's Club, Redstone Arsenal, Huntsville, AL. Chapter member-at-large, LTC Jason L. Galindo (left) presented the award, designed to recognize non-aviation personnel for outstanding support to the Army Aviation community, on the occasion of Dellarocco's change of charter while COL Michael Cavalier, project manager, Joint Attack Munitions Office, looks on. Dellarocco is moving to Aberdeen Proving Ground, MD where he assumes command of Army Test

and Evaluation Command (ATEC). This is the first time the Knight of the Order of St. Michael has been presented by the Tennessee Valley Chapter.

Washington-Potomac Chapter



COL Jeryl C. (Jill) Ludowese, commander, U.S. Army Air Operations Group, Military District of Washington is shown being presented the Silver Order of Saint Michael by MG (Ret.) Carl McNair at her retirement dinner, Mount Vernon Country Club, Alexandria, VA on 28th Aug 2010. Her retirement culminates a distinguished 28 year military career and recognition of her many achievements, one of which was leadership in air traffic services, airspace management, and air

field operations. Under her command, the 1st Bn., 58th Avn. Regt. (ATS), after deployment to Kandahar, Afghanistan (OEF), Kuwait and Iraq (OIF) received AAAA's 2002 ATS awards in recognition of individual, unit, and ATS facility achievements. She has been an AAAA member since 1984 and continues to serve as a long-standing member-at-large on the National Executive Board and as an elected member of the AAAA Scholarship Foundation Board of Governors.

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UNITED STATES ARMY WARRANT OFFICERS ASSOCIATION



SIMULTANEOUS MEMBERSHIP FORM

AAAA Membership Place "X" in appropriate box

☐ New ☐ Rejoin ☐ Renew ☐ Data Change ☐ Life

USAWOA Membership Place "X" in appropriate box

☐ New ☐ Rejoin ☐ Renew ☐ Data Change ☐ Life

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.

MEMBERSHIP DATABASE INFORMATION

Last five digits of your SSN: _____ Rank: _____ MOS: _____ Branch: _____
(Last 5 digits of SSN is used to identify you & is used for your member number. It is not released to anyone for any purpose)

First Name _____ MI _____ Last _____ Suf _____ Joined Service(yy/mm)

Address _____ Date Birth (yyyy-mm-dd) _____

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)

RELEASE OF INFORMATION Place "X" in appropriate box: ☐ I DO ☐ I DO NOT
want the above information released if requested by other members and/or to be provided to the membership-benefit companies affiliated with these organizations. Regardless of option checked, no information is released outside of these organizations.

CURRENT STATUS Place "X" in appropriate box

☐ Active Army ☐ ARNG* ☐ USAR* ☐ Retired ☐ Former Warrant Officer
☐ Associate (all others) *AGR please check ARNG or USAR ☐ Male ☐ Female

CERTIFICATIONS Place "X" in appropriate box

☐ I HOLD a Warrant issued to me by the Secretary of the Army
☐ I HAVE HELD a Warrant issued to me by the Secretary of the Army (If NO check Associate above)
☐ I AM ☐ I AM NOT entitled to wear several National Defense Medals

TERM OF MEMBERSHIP Place "X" in appropriate box - only one dues category please

☐ INITIAL ONE-YEAR MEMBERSHIP FOR WO1s ONLY AT NO COST
☐ REGULAR/ASSOCIATE MEMBER DUES ☐ 1 Yr \$50 ☐ 2 Yrs \$100
☐ 3 Yrs \$150 ☐ 5 Yrs \$250
☐ RETIRED MEMBER DUES ☐ 1 Yr \$37 ☐ 2 Yrs \$74
☐ 3 Yrs \$111 ☐ 5 Yrs \$185

☐ Check or Money Order for dues is enclosed, made out to "AAAA".

☐ Charge my: ☐ VISA ☐ MC ☐ AMEX ☐ Diner's Club

Credit Card# (No DEBIT) _____ 3 digit sec. code _____ Expires mm/yy _____

CHAPTER AFFILIATIONS (Check one)

☐ Please affiliate me with the chapters near my home.
☐ Affiliate me with the _____ Chapters
☐ Please DO NOT affiliate me with any specific chapters.

Applicant's Signature and Date _____ Optional Sponsor or Recruiter (rank & name) _____

Simultaneous Membership Form 600-DS (Fill-in) (Revised May 2008)

Art's Attic

By Mark Albertson

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



25 YEARS AGO

NOVEMBER 1985

International Military Sales

The Japanese Self-Defense Forces will be the initial beneficiary of foreign sales of the CH-47D Chinook. Boeing Vertol and Kawasaki Heavy

Industries have agreed to collaborate in the production of the helicopter. Forty-seven D-models will be delivered to the JSDF through the early 1990s. In the adjoining photo, the forward section of a Chinook is being joined with the fuselage at the Boeing plant in Philadelphia.



Inter-Service Cooperation

Recently at Camp Lejeune, NC, the Marine Corps conducted the first in-flight refueling of Army Aviation aircraft. The Army aircraft in question were two CH-53 Super Stallion helicopters.



25 is an all-terrain, all-weather armored vehicle that when fully loaded can tip the scales at 23,000 pounds.

Each helicopter was refueled while hauling a Light Armored Vehicle 25 at an altitude of 3,000 feet and a speed of 110 knots. The Marine Corps LAV-

Like Father, Like Son

MG Ellis D. Parker had every reason to be proud. Recently Gen. Parker pinned aviator wings on his son, 2LT David B. Parker. The younger Parker recently graduated from the Initial Entry Rotary Wing course at Ft. Rucker, AL.



50 YEARS AGO

NOVEMBER 1960

Happy Anniversary!

On October 11, the U.S. Army Primary Helicopter School at Camp Wolters, Tex., commemorated its fourth anniversary. Since November

1956, the school has graduated 2,846 students who have logged over 300,000 flying hours.

"Space helmet on, oh Captain Video!"

Many readers will recall those immortal words by Emmy-winning comedian, Art Carney, who portrayed America's favorite sewer worker, Edward L. Norton of the *Honeymooners*. But Army Aviation completed testing on protective equipment for helicopter pilots, not employees of the New York City Sanitation System. The hood and mask combination is to be worn by aviators while performing flight duties during hostilities, disasters and other hazardous environments which require protection from radiological, chemical and bacteriological contaminants. The uniform complaint among pilots is that the protective gear is uncomfortable in hot weather. The accompanying photo depicts the CBR protective mask and hood worn with the APH-5 helmet. Modeling the protective gear is CPT James F. Vaughn of the Aviation Board Project. Not Ed Norton of Bensonhurst.



New Record?

The 24th Aviation Company-Inf. Div. believes it set a new unit record for flying hours. In one month, the *Aviation Company* logged 2,330 flying hours while supporting the 24th Infantry Division during Exercise Summer Shield in Germany. Not to be overlooked was the part played by the ground crews. The wrench-turners kept 73 percent of the fixed and rotary wing aircraft assigned to the operation in the air. Commander of the 24th *Aviation Company* is MAJ Charles O. Rupple. Safety Officer is CPT Elmer Geiges.

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.

Nominations for the 2012 induction into the Hall of Fame are currently being accepted, with a deadline date of June 1, 2011.

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

LIEUTENANT GENERAL JOHN W. WOODMANSEE, JR. (RETIRED)

ARMY AVIATION HALL OF FAME 2004 INDUCTION

LTG John W. Woodmansee Jr. (Ret.) entered flight school in 1957 as a second lieutenant and remained on flight status until he retired in 1989 as the Commanding General of V Corps.

He is believed to be the first Army aviator to fly solo with night-vision goggles, doing this in 1963.

While serving in Vietnam in Huey gunships, Woodmansee was recommended by the Marines for the Navy Cross. On his second Vietnam tour, Woodmansee commanded the 7th Sqdn, 1st Cav in the Delta, the largest air cavalry squadron in Vietnam.

During his two years of combat flying in Vietnam he logged more than 1,500 combat hours and was awarded the Silver Star, five Distinguished Flying Crosses and the Air Medal with valor device.

After serving as a White House Fellow for Secretaries of State Dean Rusk and William Rogers in the late 1960s, Woodmansee was assigned to U.S. Army Training and Doctrine Command where he identified critical aviation organizational and material needs in Combat Developments.

As the two-star DA DCSOPS Force Developer, he pushed these changes through the system.

He commanded the 2nd Armored Division before being promoted to command of V Corps in Germany.

After retiring from active duty, he served on the Defense Science Board, where he continued to work critical aviation issues while serving on the Army Science Board.



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