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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. Gray Eagle features a heavy-fuel engine, triple redundant avionics, and redundant flight controls/surfaces, and can fly for more than 30 hours and carry four Hellfire missiles. Shown here with an AH-64D Apache helicopter, Gray Eagle recently participated in the Army's breakthrough Manned-Unmanned Systems Integration Capability (MUSIC) exercise which demonstrated how implementing a common open architecture can allow ground troops, along with manned and unmanned aircraft, to communicate, seamlessly share data, and collaborate in a live warfare event under one commander. *Caption provided by the advertiser*. **Briefings**...

LATE-BREAKING NEWS ANNOUNCEMENTS NOTES

Austin Nominated for VCSA



GEN Lloyd J. Austin III, commander of U.S. forces in Iraq, has been nominated by President Obama to be the Army's next Vice Chief of Staff. If confirmed by the Senate, Austin will succeed GEN Peter W. Chiarelli who has served in that posi-

tion since August of 2008 and will be retiring later this year. Austin took command in Iraq last year when GEN Raymond T. Odierno was chosen to lead the now-deactivated Joint Forces Command. As VCSA, Austin will again work directly alongside Odierno who assumed responsibilities as the Army's chief of staff on Sept. 7. They previously served side-by-side in Iraq when Odierno was the U.S. forces commander there and Austin commanded the XVIII Airborne Corps and the Multi-National Corps-Iraq from January 2008 to April 2009.

RPG Caused Chinook Crash that Killed 38

U.S. military investigators have concluded that the Chinook helicopter crash in Afghanistan that killed 30 U.S. troops and 8 others in August was downed by a rocket-propelled grenade that hit the rear rotor, causing the aircraft to fall vertically to the ground and burst into flames. The Aug. 6 crash was the deadliest single incident for U.S. forces in the decade-long war and the Taliban claimed responsibility. No one survived the crash in Tangi Valley of Wardak province, about 60 miles (97 kilometers) southwest of Kabul.

The official investigation report, released on Oct. 12, indicated a previously undetected group of suspected Taliban fighters fired two or three RPGs in rapid succession from the tower of a two-story mud brick building approximately 220 meters south of the aircraft. The first RPG missed the helicopter, but the second struck one of the blades on the aft rotor and exploded causing the helicopter to spin violently and then crash in a dry creek bed where it was engulfed in flames; the fire triggered several explosions of fuel and munitions.

The troops killed were flying into the area to aid a U.S. Army Ranger platoon, which had been flown in earlier to try to kill or capture a Taliban leader. Investigators found no wrongdoing by those involved in the mission; the decision to transport all 38 who were killed in one helicopter was "tactically sound" to mitigate the risks of ground fire, the report said.

Grounding of Fort Rucker's OH-58 Delta Fleet

The decision by Fort Rucker officials to ground its fleet of OH-58 Delta helicopters was a proactive step to an identified system concern. The system in question was a newly installed flight control component. The anomaly did not cause any damage to any aircraft or injury to any personnel. Fort Rucker officials decided to ground the OH-58D Kiowa Warrior fleet only at Fort Rucker as a safety precaution since no other OH-58D KWs in the Army inventory have received the upgrade to date. There is an immediate fix and the grounding is expected to be of short duration and not expected to heavily impact the training of students in the OH-58D Kiowa Warrior course.

Branch Chief Talks to NEB



U.S. Army Aviation Branch chief and commanding general of the U.S. Army Aviation Center of Excellence and Fort Rucker, MG Anthony G. Crutchfield (second from right), addresses the AAAA National Executive Board meeting Oct. 10 at the Association of the United States Army Annual Meeting in Washington, D.C. Army Aviation leaders regularly speak directly to the NEB at their meetings throughout the year.

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NOVEMBER 30, 2011

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AAAA President's Cockpit



Professional Forums and the Army Aviation Congressional Caucus

By LTG (Ret.) Dan Petrosky

t has been a busy month. We just completed a very successful Luther G. Jones Aviation Summit at Corpus Christi, TX and the 30th annual Aircraft Survivability Professional Forum in Huntsville, AL.

I can't thank COL Chris Carlile, CCAD commander; COL Russ Leaphart, PM ASE; MG Jim Rogers, CG, AMCOM; MG Tim Crosby, PEO Aviation; and BG Harold Greene, PEO IEW&S, enough for their outstanding support in making these two events extremely productive.

In addition, I was able to attend the Apache Block III roll out ceremony in Mesa, AZ. The event was first class and well supported by Army Aviation.

MG Crutchfield, MG Crosby, and COL Shane Openshaw were keynote speakers, focusing their comments on America's Soldiers and what the Block III can do for them.

Our aviation leaders all made certain to give credit to the Defense Industry Team and especially their work force for bringing Block III in on time and on budget.

I also visited with our Arizona Chapter which is well lead by Mike Burke. Both the Corpus Christi and Arizona chapters are providing excellent programs for their members.

AAAA national vice presidents Mark Grapin, our VP Membership, and Bob Carter, our VP Chapters, are reaching out to support them.

As most of you know Army Directive 2011-20 was released on October 14, 2011. The AD identified the Army requirements for all future conferences. As a nonprofit, all volunteer fraternal organization we at AAAA want to fully comply with the AD and the Army's intent.

Fortunately, we were able to work around the clock to adjust the agendas to fully comply with the AD for the already scheduled and AAAA contracted forums for the rest of this calendar



COL Shane Openshaw, the Army's project manager for Apache Helicopter, addresses attendees at the Block III Roll Out ceremony on Nov. 2 at the Boeing Apache production facility in Mesa, AZ.

year. We greatly appreciate the support of AMCOM, CECOM, and PEO Aviation leadership in helping us ensure we followed the AD guidance correctly.

We are proceeding with all currently scheduled and contracted AAAA events by fully adhering to the requirements of AD 2011-20.

Congressmen Mo Brooks (R-AL) and Mark S. Critz (D-PA) are cochairing a brand new "Army Aviation Caucus." We congratulate them on their initiative and applaud their effort to get the necessary 15 Congressmen together to form this caucus and support the Army Aviation community and our aviation Soldiers and their families. Consider encouraging your representative to join this caucus.

We look forward to sponsoring events for them on the Hill and their support for the U.S. Army Aviation Soldier and Family.



LTG Dan Petrosky, President

Did You Know

The Knight of the Order of Saint Michael was created in 2010 to recognize excellence in the ranks of our supporters who may not be uniformed members of the Aviation Branch, DACs or directly involved in Army Aviation.

This is an especially effective tool in rewarding members of other armed services, foreign nationals, non-Aviation Branch personnel, community leaders, politicians and others. Please keep this in mind when nominating someone for the different levels of the Order of Saint Michael. And remember the Our Lady of Loreto Award for our spouses who do so much every day to support Army Aviation.

For more information and nomination forms for these and all other AAAA awards, please visit www.quad-a.org and click on the Awards tab.

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From The Aviation Branch Chief





By MG Anthony G. Crutchfield

his month's issue of AAAA Magazine focuses on unmanned aircraft systems (UAS) and provides an air traffic services (ATS) update. I think it is very appropriate to have these two entities share the issue.

Currently, there is much interest about UAS operating within the National Airspace System. As we see more and more UAS returning from overseas operations, we need to ensure that our UAS operators remain proficient and have the ability to train; they need airspace to do that effectively.

Not surprisingly, the FAA is keenly interested in keeping the commercial traffic deconflicted for the safety of all involved. Having Army UAS share that airspace is a new concept. It will take a lot of planning and coordination to come to common ground on the subject.

In order to allay the FAA's concerns and to ensure that unmanned operations are completely standardized, the ATS Command (ATSCOM) is working with the Directorate of Evaluation and Standards (DES) and the U.S. Army Aeronautical Services Agency (USAASA) to refine inspection and regulation requirements for UAS operations occurring under a Federal Aviation Administration (FAA)endorsed Certificate of Authority (COA).

With these capable agencies working in concert, we, as a community, can rest assured that manned-unmanned (MUM) operations, whether abroad or now stateside, will be safe and effective.

Safe and Effective is an Understatement

Though the concept of a large number of MUM operations in CONUS is new for the FAA, controlling this newest addition to the Aviation arsenal has become common place for ATS Soldiers in the last 10 years in Iraq and Afghanistan. Controllers have become accustomed to working Joint, Coalition and civilian fixed wing, rotary wing and unmanned aircraft in and out of airfields as diverse as simple landing pads to international airports.

Today, in Iraq and Afghanistan, our theater airfield operations groups (TAOG), airfield operations battalions (AOB) and the combat aviation brigade's (CAB) ATS companies are manning tactical and fixed based control towers, managing airspace, providing situational awareness to the CAB commander and talking aircrews down in instrument meteorological conditions on Precision Approach Radar (PAR) approaches.

ATS Soldiers keep our Aviators safe and give us peace of mind in very complex airspace; often in adverse weather conditions. We may take that calm and confident voice on the other end of our radios for granted when it is "clear blue and 22."



Soldiers of the 1st Bn., 245th Avn. Regt. (Airfield Operations), 164th Theater Airfield Operations Group, man a control tower in Afghanistan.

However, like the MEDEVAC helicopter that went inadvertent shortly after take-off in Afghanistan this past August realized, you can breathe a little easier when you hear that voice proclaim "radar contact."

The End of an Era

Currently, ATS Soldiers are deployed across Kuwait, Iraq and Afghanistan and doing a truly remarkable job of keeping our aviators safe in some of the most dangerous and congested airspace in the world. There is no other branch in the U.S. Army that is in greater demand than Army Aviation; as our government talks of a "draw down" overseas that demand will begin to decrease.

Just last month, ATS Soldiers ceased operations at Liberty Tower in Iraq. Liberty Tower was a central figure in the Victory Base Complex (VBC), a cluster of U.S. military installations surrounding the Baghdad International Airport (BIAP). Because of its mission and central location, Liberty Tower was known as a major ATS asset that helped set the stage for the success of U.S. Forces in and around Baghdad.

The deactivation is truly an end of an era and is a clear indicator that a military draw-down in Iraq is a reality even if the extent of such a draw-down is not yet known.

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1-245th AOB Soldiers man a radar during their culminating training exercise (CTE) at Fort Hood, TX prior to their deployment to Afghanistan.

Not So Fast!

While there may be a mission change for Aviation coming in Iraq and Afghanistan, one thing will remain constant: the need for Army Aviation. Aviation forces have proven to be critical to success on the nonlinear, non-contiguous battlefield, and even if the battle lines change, the importance of our mission remains unchanged.

Aircraft move troops and equipment, resupply our forces, strike the enemy from close and stand-off distances with lethal fires, image the battlefield, and disrupt enemy operations.

None of these tasks can be accomplished unless our aircrews have safe and expeditious airspace control measures to get them to the target, bases to launch from and recover to and regulated approaches available when weather changes the plan.

The Future of Air Traffic Services

The future of ATS is the well trained Soldier. We rely on our ATS Soldiers (15P: Aviation Operations Specialist, 15Q: Air Traffic Control Operator and 94D: Air Traffic Control Equipment Repairer) to provide and sustain flawless service day or night, whenever and wherever air traffic services are required.

Collectively the ATS community has overcome antiquated legacy equipment issues, balanced personal readiness constraints, and successfully deployed to multiple theaters; always ready and willing to support. It is not hard to imagine a time, not too far down the road, when development efforts thrust ATS past just improving the current computerenhanced radar capabilities to where ATS is more automated than not.

This future technology, only a few decades down the road, may seem to make the controller more of a system manager overseeing automated systems and manually intervening to resolve situations not handled well by the computers.

However, human controllers, and their importance to the mission, will never be automated out of existence.

Even in "The Final Frontier," as discussed in Star Trek, Lieutenant Uhura provided air traffic services, though formally called the Communications Officer!

The point is, due to the very nature of their mission, ATS isn't going anywhere, though evolution is inevitable and even something we should strive to embrace. Evidence of our evolution is our adaptation to the mission change in Iraq.

Currently the Air Traffic Services Standardization Element (ATSSE) from both of the Army's TAOGs (164th TAOG commanded by COL James Macklin and the 204th TAOG commanded by COL Stephen Todd) are working tirelessly to help refine the requirements associated with Iraq's end of mission as well as the development of airfield efforts in Afghanistan. You can read about our other ATS advancements in the ATSCOM and PM-ATC updates in this ARMY AVI-ATION magazine issue.

The Modern ATS Soldier

While computers are an asset and advancing technology will always have its place – the air traffic controller is invaluable. The best ATS Soldiers are masters of numeric computations and mathematics, are assertive, have tremendous decisionmaking skills, situational awareness and possess excellent short-term memory and visual memory abilities. These Soldiers must be physically and mentally tough, remain calm under pressure, and know airspace rules like the back of their hand.

Superior communication, however, is the one non-negotiable when providing air traffic services. ATS Soldiers must be both concise and precise when focusing on the exact words they, or their pilots use. A single misunderstanding about an altitude level or runway number or heading to follow can have tragic consequences.

The one thing that I am certain about concerning our ATS Soldiers is that they wouldn't subject themselves to the challenging training, the stressful environment, and such high standards for conduct and medical fitness if they didn't absolutely love what they do and the Army Aviators that they support.

Thank You

Finally, I thank all of our ATS leaders and Soldiers for what you do for our branch and our Aviators around the world. Thanks also to their spouses and children because, while the Soldiers were off doing a job that they love, their families sacrificed and suffered; in ten years of combat, they are also stressed and tired.

In a demonstration of thanks to the ATS Soldier and their families, I will work to ensure that Army ATS is manned, funded, trained and equipped for the future, whatever that future may be, even beyond the next conflict...beyond Iraq and Afghanistan

...to the next frontier. Above the Best!

____**~**~~_

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

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Chief Warrant Officer of the Branch Update



Developing the Unmanned Aircraft Systems Warrant Officer

By CW5 Michael L. Reese

Unmanned Aircraft System (UAS) Warrant Officer (150 U) is a relatively immature military operational specialty (MOS) that was initially wed to the Military Intelligence (MI) Branch. Although still heavily linked with MI, several years after inception the Aviation Branch accepted ownership of all programs of instruction and career management/development of all UAS personnel.

The roles of the UAS warrant officer are vast and the extensive responsibility we saddle a WO1 with upon his/her first duty assignment deserves the appropriate level of initial training. This month I will address how we plan to effectively develop the UAS Warrant Officer in this emerging field.

UAS operations support commanders' ability to plan, coordinate, and execute missions by increasing situational awareness through intelligence, surveillance, and reconnaissance. Armed UAS provide the commander with direct fire capabilities for close fight and shaping operations.

Additional functions are: enhanced targeting through acquisition, detection, designation, suppression and destruction of targets through autonomous operations or teamed with manned platforms. These are the basic mission fundamentals of the UAS organization and are managed by warrant officers.

Major Responsibilities from the Beginning

Upon graduating the six week Warrant Officer Basic Course, a WO1 is responsible for supervising UAS operations that include mission planning, payload operations, and launch/recovery procedures.

The officer must administer this program in accordance with AR 95-23 (UAS Flight Regulations), TC 1-600 (UAS Commanders Guide and



Deceptively simple looking unmanned systems like the Raven pictured here require in-depth technical knowledge and expertise to ensure readiness and combat effectiveness at all times... part of the UAS warrant officer roles and mission.

Aircrew Training Guide), and the appropriate standard operating procedures; in essence the WO1's responsibilities equal that of a manned company level Standardization Pilot.

A CW2 150U serves as an intermediate level expert who is technically and tactically proficient at leading, training, managing, maintaining, sustaining, and advising the commander on all assigned unmanned systems. He functions as a platoon leader providing leadership development, advice and counsel for enlisted soldiers and officers.

Enabling Success

To enhance the preparedness of our UAS WO1s and CW2s we intend to redesign the Warrant Officer Basic Course in order to enhance leadership and adequately address required skill sets needed for assignment to a brigade combat team.

An additional requirement to restructure the course is due to autho-

rizing other than 15W warrant officer assessment which has historically been the only authorized feeder MOS.

Current 15W strengths cannot support the projected growth of the warrant officer requirements without depleting the enlisted strength and experience base. The Aviation branch will temporarily open eligibility prerequisites to NCOs in most 15 series and will potentially include other MOSs that possess documented UAS experience and proven leadership qualities.

All non-15W applicants will be screened by the Aviation Officer Proponent to ensure minimum requirements are met prior to the boarding process.

Training and Development

To ensure our warrants are properly developed throughout their career, we must ensure the regulation that details the lifecycle is correct.

Department of the Army Pamphlet

600-3 outlines officer development and career management and must be updated to ensure the 150U have the opportunity to be successful.

Due to the wide array of responsibilities it is essential that the UAS warrant is scheduled to attend some or most of the following training throughout their career: Aviation Safety Officer Course, Tactical Operations Course, Phase 1 Maintenance Managers Course, Armament Officer Course, Government Flight Representative Course, Master Gunner Course, Joint Firepower Control Course, BAE Course, and Joint Fires Observer.

Naturally all officers will not attend all courses listed; instead, selection to attend courses will be similar to the tracking process in manned aircraft and commensurate with rank and duty position.

The 150Us can also look forward to a Warrant Officer Advanced Course specific for their career. The course is still under consideration and implementation dates are not certain but will be designed to further develop UAS CW3 expertise and will likely be conducted in concert with the Aviation Warrant Officer Advanced Course.

Getting it Right

The Unmanned Aircraft System Warrant Officers are the pioneers in a career field that is a major part of Aviation's future. The tactical successes witnessed over the last decade through UAS support have not been easy and a major aspect of the professional growth has been institutionalizing manned aviation safety and standardization principles.

But that is not the only solution: the mission remains technically complicated; systems are becoming more advanced; integrating manned/unmanned teaming is becoming more prevalent; training is complicated by Federal Airspace restrictions; and involvement with contactors and the civilian work force is critical for success.

With all of the challenges, providing our warrant officers with the level of training required for success is essential and your Aviation Branch is committed to getting it right.

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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ARMY AVIATION

NOVEMBER 30, 2011

Command Sergeant Major Update



Achieving Success in Unmanned Aviation

By CSM Tod L. Glidewell

Dvery decade or so an item is fielded that changes our Army and the way we operate in our environment. Arguably, aviation has been involved with many of these innovations over the last fifty or so years.

For our fathers and grandfathers it was items like jet aircraft and the helicopter that changed the face of battle.

For our generation it has been the unmanned aircraft system (UAS). And although it is not a new idea, it is probably the most important item to enter our Army over the last decade and the community has grown dramatically since 2001.

When we entered OEF many people didn't know what UAS was or that the Army even had such a thing, let alone that we'd fly over a million hours over the next decade!

Industry has done well to provide unmanned solutions, but the individuals in the shelter and who maintains these systems are still relatively unknown.

These Soldiers who operate and maintain these systems have revolutionized the way we find, fix, finish, exploit, analyze, and disseminate (F3EAD) information on the battlefield as well as other mission sets.

Only the Beginning

As great as this may sound we must realize that we have just scratched the surface as we enter a new era.

Some may even liken what we are doing today to the findings of the Howze Board and test of the 11th Airborne with MG Kinnard as they scratched the surface of a new era establishing the airmobile concept.

The Howze board test led to an era of unprecedented change in our Army doctrine as we incorporated the use of the helicopter while our future lies in discovering methods to utilize the UAS.

As we move forward with the fielding of the Full Spectrum Combat Aviation Brigade, which includes a



Students prepare a Shadow unmanned aircraft system for mission launch at Fort Huachuca, AZ.

Shadow troop and Gray Eagle company, to the Division, it will be these individuals and their leaders who pave the way to the future.

The Directorate of Training and Doctrine (DOTD) is working to capture these lessons to formulate future training and doctrine requirements.

Recently, we added SFC Miller from DES to DOTD to jumpstart this effort and as we conduct a search for the additional UAS experience that will help to continue the way ahead.

This bill to write the future does not come without a cost.

In the infancy of the UAS program much of our effort has been dedicated to those at the tip of the spear.

As a result we have formed silos of experience and lessons learned that not only need to be shared but taught.

This will require better talent management to ensure the individuals with the right experience are spread across the force to the right locations.

Training the Force

Effective Oct. 1, the authorizations grew dramatically for the 15E MOS and branch responded by working with Human Resources Command to identify 30 aviation NCOs to voluntarily reclassify to 15E.

These NCOs will attend training in the 2nd and 3rd quarters of FY12 and provide the skills, experience and maturity to units in the field as an interim solution until we build this new MOS.

Also in the short term we are incorporating many of the lessons learned from the field into the training at 2nd Bn., 13th Avn. Regt. at Fort Huachuca, AZ and into the Non-Commissioned Officer Academy, Fort Rucker, AL campus.

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- Robert M. Leich Award
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Suspense: January 1

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Evolving Training

The following changes have been incorporated to the 15W30 Advanced Leaders Course (ALC):

• The old 15W ALC focused on the mission coordinator (MC) aspect of the MOS. This has changed to an instructor operator (IO) focus to better prepare these NCOs to lead training in their perspective units at home station.

 The Direct Mission Operations Evaluation has been replaced with an IO evaluation. Students will not be evaluated in an MC duty position, but rather in an IO duty position. Example: Conduct a Proficiency Flight Evaluation (PFE) for an initial operator.
Added instruction on: Individual Aircrew Training Folder (IATF), Individual Flight Record Folders (IFRF), Fundamentals of Instruction, and UAS standardization.

• The Simulator Training section of the course hours have been increased from 39 to 72 hrs.

• Total computed academic hours have increased from 292.0 to 314.4 hrs.

• The optimal class size has been increased from eight students to 16. In a nutshell, the 15W ALC class is evolving to teach the future leaders of this Military Occupational Specialty (MOS) the skills necessary to understand and execute training at a platoon level. This training also includes instruction on the Commanders Aircrew Training Program (ATP) requirements and to ensure that it is being run in accordance with the Army policy.

By familiarizing students with these techniques of instruction we will be giving them the tools necessary to be fully informed leaders in our MOS.

The Next Level

The initial 15E Advanced Leaders Course (ALC) and Senior Leaders Course (SLC) will begin at the Ft. Rucker Campus of the NCOA.

We are currently working to validate the course curriculum and will hold the first classes in January 2012.

Elements of the UAS Project Manager's office, TRADOC Capability Management UAS Office, U.S. Army Aviation Logistics School and 2/13th Avn. have spent an incredible amount of effort into finally ensuring this course became a reality. A special thanks also to the National Guard who have graciously loaned us a Shadow system and launcher until the training aids can be delivered. ALC will be 8 weeks and SLC 6 weeks incorporating lessons learned on everything from system troubleshooting to leadership and maintenance management.

The Chief Warrant Officer of the Branch, CW5 Mike Reese, is looking at the program of instruction (POI) of the 150U course and to widen the aperture of those considered for this career field as well. *Editor's note: see CW5 Reese's column in this issue.*

As we move down this path, we are carefully considering experience and the quality of the individual's aviation skills rather than quantity.

Nurturing the Future

The UAS community has an extremely bright future but we must come together and share experiences if we are to be successful. Both DES and the FORSCOM Aviation Resource Management Survey (ARMS) have been conducting visits to UAS units across the force and the results may surprise some.

Bottom line is as good as we may seem to be doing in some areas we are failing in others. Adherence to our own regulations and standard operating procedures (SOPs) in standardization, safety, maintenance and record keeping seem to be our common issues. We are a standards-based Army and more importantly a standards-based Branch.

I need your help working together with DES, the ARMS teams, and those units you share your battle space with at home and during deployments to ensure that we are sharing experience and following the published standards.

If you have questions you can't get answered out there on installation, consult DES or the ARMS team for assistance. CW3 Sherman and now SFC Holderith, who replaced SFC Brian Miller, stand ready to provide any assistance necessary.

I also acknowledge and appreciate the help from SFC Stephen Rogers, Ft. Rucker NCOA, and SFC Brian Miller, DES/DOTD, who contributed information to this month's column.

Above the Best!

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.

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U.S. Army Combat Readiness/Safety Center



Raising the Heat on Risk

By BG William T. Wolf

A the direction of Headquarters, Department of the Army, the U.S. Army Combat Readiness/ Safety Center's change of command and my retirement have been postponed until further notice. I will retain duties as director of Army Safety and commanding general, USACR/Safety Center. I thank you all for your support and hard work during the past three years and look forward to serving with you in the months ahead.



SFC Kevin Barlow gives advice to a group of Soldiers during drill and ceremony class at the Future Leader Course on Contingency Operating Base Adder, Iraq, April 15.

We're just a few weeks past the close of fiscal 2011, and preliminary figures show our Army held steady on accidental losses during the year, with neither a decline nor increase in Soldier fatalities from 2010.

Late reports or reclassifications could change final numbers somewhat within the next few weeks, but there's no doubt our Leaders and Soldiers are doing a fantastic job keeping the focus on safety every day.

The fact our Army has maintained historically low fatality rates during a time of war is remarkable, and our challenge will be carrying that momentum forward and saving even more lives in 2012.

Leadership and Standards

Leader engagement and standards enforcement remain critically important to this fight. In fact, the two are mutually dependent — being an engaged leader means enforcing the standard!

On-duty fatal accidents continue to drop because leaders are more involved in the details of their Soldiers' activities, from PCC/PCI to keeping Soldiers focused throughout mission execution.

Off duty, however, the lack of direct supervision shows: last year, 78 percent of all accidental losses occurred after duty hours and on weekends. Not every Soldier behaves recklessly off duty, but there are many who do and, unfortunately, some pay a deadly price. If you're not directly engaging with your Soldiers every day, there's no better time to start than now.

The chilly nights of fall are quickly giving way to the full effects of winter, and driving hazards will become a real problem as snow and ice appear more frequently in the coming months. Dangerous road conditions and indiscipline are a tragic combination, and many high-risk Soldiers won't change their driving behaviors to accommodate the weather.

We have to reach them now and enlist as many of their buddies as possible to keep them on a safe path. None of us should feel awkward about pointing out risky behavior and acts of individual indiscipline.

I ask that all of you, both leaders and Soldiers, assume this responsibility for the good of our fellow Soldiers and our Army.

Information is Power

...and the USACR/Safety Center strives to give you the tools that will help keep your Soldiers safe. Particularly timely right now is our Safe Fall/Winter Campaign, a toolkit



United States Division - South CSM Jim Champagne, speaks with Soldiers of the 12th Combat Aviation Brigade's Future Leader Course on Contingency Operating Base Adder April 15. The course gave Soldiers tools to prepare for the Army's Warrior Leader Course.

that contains feature articles, videos and posters focused on seasonal safety topics.

The campaign is a valuable resource for updating safety boards, building safety briefs or just starting a dialogue on potential hazards, so please download your kit today at *https://safety.army.mil*.

We'll be adding new media to the campaign periodically, so be sure to check back often for the most up-todate information available.

We also recently launched "Roadrageous," a great program designed for Soldiers displaying risky driving behaviors. This is a fantastic tool commanders can use to address and correct high-risk drivers within their formations.

The holidays are near and during this season of thanks, I want to say again how grateful I am for each of you and the dedication you continue to show every day for safety.

I wish you all a blessed Thanksgiving and wonderful holiday break filled with Family and friends. Play it safe and always remember your fellow Soldiers who are counting on you!

Army Safe is Army Strong!

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

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U.S. Army Aviation Logistics School Update



This month, I have asked LTC Mark Teixeira to lay out some of the learning concepts we at your school house work with to provide today's Soldiers with the best aviation maintenance training possible. COL Heitkamp, Commander

USAALS Learning Concept for Aviation Maintainers Training Tomorrow's Aviation Soldier Maintainers Today!

By LTC R. Mark Teixeira and Mr. Steven Tisdale

M illennial generation Soldiers attending training at the U.S. Army Aviation Logistics School (USAALS) arrive with extensive virtual knowledge and experience. However, this knowledge has come at the expense of more traditional hands-on maintenance skills gained by repairing physical cars, bikes, motorcycles, etc.

Responding to training skill sets, USAALS' concept designers and training developers have continually adapted training methodology to meet the Army's needs and have built a training model to train the Millennial Soldier.

Believing introduction to unfamiliar content is best conducted by experienced Soldier subject matter experts (SMEs), we have retained the traditional instructor-led conference to introduce concepts, processes, and supporting skills and knowledge (S&Ks). These initial conferences use familiar on-screen presentation technology of Microsoft PowerPoint as well as newer more interactive Venus engine-driven presentations.

Recognizing that research and surveys indicate Millennial Soldiers learn better and retain more when immersed in the familiar virtual environment, we reinforce these basic concepts and processes through computer-based training (CBT).

CBT includes instructor-led and level-appropriate individual Interactive Multimedia Instruction (IMI) lessons and aircraft specific software maintenance tools (3-Dimensional component locators and wire enumerators) to expand system description and general operations. Students increase their understanding of sys-



The L-10 VIE, or virtual immersive environment, allows AH-64D maintainers to practice complex repair procedures in a virtual environment before exposure to real world components.

tem operations lessons containing structured theory of operations, maintenance operational checks (MOCs), and fault isolation procedures (FIPs) by interacting with immersive media which demonstrate all mechanical, electrical, hydraulic, and pressurized air interactions.

While remaining in a classroom setting, students next apply their recently acquired knowledge by completing virtual structured maintenance-driven scenarios surrounded by gaming opportunities which reward students for their maintenance achievements with free play enemy engagements. In the virtual crew station, students complete all required maintenance actions, including complete MOCs and FIPs while following the exact steps of the Interactive Electronic Technical Manual (IETM).

As part of the scenario, the Soldier receives briefings from his supervisor and the production control and quality control NCOs, obtains the appropriate tools and test equipment from the tool room, and requisitions the required parts from Tech Supply.

Soldiers review forms and records for errors as part of the scenario. The student is then required to perform all required IETM actions to fix and validate the repair followed by an after action review (AAR) comparing all Soldier's actions against the IETM requirements and discussing any deviations.

Virtual training allows students to learn at their own pace, practice skill sets in controlled virtual scenarios, and be tested for mastery of those skills.



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Best of all, it also provides training material Soldiers can use in the field for self-paced sustainment training, but it is not the total training solution.

Future maintainers still need to be introduced to and develop mastery of maintenance procedures, fault isolation skills and the use of test equipment specific to the Army Aviation platform that they will eventually be maintaining in the field.

Virtual Immersive Environment

Hands-on performance is then introduced, and it is here that USAALS' training model has incorporated technology the most.

Beginning in 2008, a corroborative effort with the Apache Program Office's Training Branch Chief, Mr. Eugene "Andy" Young, and his training development contractor, Logistics Support International (LSI) out of Jacksonville, Florida, resulted in an Apache Longbow Training and Technology Strategy.

This strategy predated, but remarkably coincides with the principles of TRADOC Pam 525-8-2 "The United States Army Learning Concept for 2015" released in 2010. It meets the intent of the TRADOC Pam by leveraging the latest technology and capitalizing on the computer rich background of today's Millennial Soldiers by assimilating them to aviation maintenance procedures in a high-fidelity Virtual Immersive Environment (VIE).

You may be asking what is this VIE

and will it produce Army Aviation maintainers that have the right skill sets to maintain the most advanced helicopter fleet in the world? VIE combines advanced media technologies with high resolution graphics and touch sensitive displays to simulate fielded Apache helicopters. It is integrated with a fully modeled physical crew station to build the physical-virtual linkage and the Soldier's experience and confidence.

Students now complete previously introduced MOCs in the modeled physical crew station, learning switch locations and building the tactile skills required to repair real helicopters. After completing the crew station portions procedures, Soldiers then transition to the touch sensitive screen displaying the VIE.

The VIE synchronizes with the modeled crew station through the instructor operator station (IOS) to display the results of all switch and control inputs, allowing full replication of fault indications for the Soldier to troubleshoot.

The Soldier then follows the IETM to maneuver his Avatar maintainer around the VIE, opens required access panels, and identifies proper components and associated connector cables.

If required, Soldiers can disconnect cannon plugs, obtain virtual test equipment, complete voltage and resistance checks called out in the IETM, and finally complete the associated repair procedure.



eight honorable mentions (\$50).

MTDs Complete the Cycle

The VIE is not meant to replace the tasks performed on a hardware device but rather supplement and streamline the training. Training still does and will always culminate in a hands-on exercise or performance exam on high fidelity aircraft representative hardware maintenance training devices (MTDs).

Adding the VIE to MTDs provides the ability to insert previously unavailable faults because inserting them would damage the MTDs. Inserting relevant faults improves training and gives Soldiers experience simulating actual field duties.

In the virtual environment, students are able to use and exercise, to the fullest capability, all platform unique support equipment and test sets – a new capability to Apache training. Training on a device means that students perform maintenance in a tactile environment where they exercise real switches, buttons, and controls that provide the exact results an aircraft would.

The difference now is the student can perform in a virtual environment any and all maintenance procedures associated with what is displayed as a failure in the tactile environment without having access to or damaging a real aircraft.

As an added bonus, the software used for the virtual environment can be interactive with the already fielded Longbow Procedural Trainer (LPT) software providing an excellent sustainment tool for use in all Apache units.

Having demonstrated both the virtual and hands-on ability to properly identify failure causes, substantiate the findings through aircraft indications, and perform repair procedures in accordance with the IETM, Soldiers are ready to "get dirty" in their assigned units performing some real maintenance.

The end result is a better trained maintainer at a lower cost who can immediately contribute to combat readiness!

- * * –

LTC R. Mark Teixeira is director of the Department of Training Plans and Evaluation, and Mr. Steven Tisdale is the chief, New Systems Training Division, U.S. Army Aviation Logistics School, Joint Base Langley-Eustis, VA.

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SPECIAL FOCUS UNMANNED AIRCRAFT SYSTEMS

A Shadow taking off in support of U.S. Navy Composite Training Unit Exercise (COMPTUEX), May 2011, at San Diego, CA.



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The United States is not the only nation expanding its employment of unmanned aircraft systems (UAS) for intelligence, surveillance, and reconnaissance (ISR).

In increasing numbers, countries around the globe are originating and employing UAS technologies that enhance their ability to monitor U.S. forces.

Anticipating this challenge to deployed forces, U.S. Carrier Strike Groups (CSG) are fortifying their predeployment training programs with exercises matched to the expected threat.

By incorporating a UAS, they prepare to detect, track, and identify foreign UAS in their respective operations area. or 10 days in spring of 2011, the USS John C. Stennis Strike Group took sharp notice as a U.S. Army RQ-7B Shadow flew patterns over San Clemente and over water.

For training purposes, the unmanned aircraft executed pre-planned flight routes to replicate an adversary UAS surveilling a U.S. surface action group. The venue was the U.S. Navy Composite Training Unit Exercise (COMPTUEX) and Joint Task Force Exercise (JTFEX), held May and June 2011.

Prescribed vignettes provided Aegis-capable surface ships the opportunity to familiarize their radar operators, visual observers, and electronic warfare specialists with nuances of detecting, tracking, and identifying a threat unmanned system. The Shadow is in use by U.S. Army combat brigades and is the primary full motion video component of a brigade's ISR arsenal.

In regard to endurance, size, payload, and profile, it also happens to have characteristics similar to those of a number of highly proliferated for-



Soldiers from 10th Special Forces Group operate from the ground control station for a Raven unmanned aircraft system in support of Joint Task Force Exercise (JTFEX), in June 2011 at San Diego, CA.

eign UAS, making it a natural choice for the COMPTUEX and JTFEX.

The Joint Unmanned Aircraft Systems Center of Excellence at Creech Air Force Base, Nevada, facilitated the deployment of the Shadow to San Clemente Island, California.

The 10th Special Forces Group (SFG) Shadow Platoon from Fort Carson, Colorado, provided three air-frames, support equipment, and 10 soldiers to operate and fly the RQ-7B's.

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Shadow vs. Raven

The staff of Commander, Strike Force Training Pacific (SFTP) recognized the need for adversary UAS familiarization training well before the Joint Unmanned Aircraft Systems Center of Excellence approached the Navy to bring the 10th SFG platoon to San Diego.

Previous adversary UAS training was conducted employing an RQ-11 Raven contracted and operated by the manufacturer. The Raven met short-term goals, namely, to familiarize SFTP, range, and controllers at the Southern California Offshore Range with the nuances of safely operating a UAS, and for deploying surface forces to have a training target for radar and electronic intelligence operators. It was a good first step toward integrating UAS into predeployment exercises, even though the Raven is limited in range, endurance, and altitude.

However, in addition to lacking the legs of a larger UAS, the Raven is a Group I UAS (defined as less than 20 lbs maximum takeoff weight), which is not representative of what an adversary UAS may use to surveil a U.S. CSG. In contrast, the RQ-7B Shadow is a Group III UAS (defined as between 55 and 1320 lbs max gross takeoff weight); its wingspan of 14 feet is over three times that of the Raven with a payload capacity over 15 times that of the Raven. (The Raven has a fixed, non-maneuverable internal camera as a payload; the Shadow has a fully gimbaled 60 lb camera system.)

The Shadow proved very similar in design and performance to many of the UAS employed by foreign militaries around the world – very appropriate for use by SFTP in pre-deployment familiarization training.

Sailors on board destroyers of Destroyer Squadron Two One and the USS Mobile Bay of CSG 3 successfully tracked the UAS using radar and electronic means, and visually via gun camera systems from various distances and profiles.

Objectives

The primary goal was simple – familiarize deploying surface ships with the representative profile and characteristics of a foreign UAS, one they may very well encounter in seas abroad.

In addition, however, this was the first time a Group III UAS was ever employed in the training airspace around San Clemente and in the restricted area airspace off the San Diego coast.

Other UAS have been employed this way in the past, but only Group I UAS systems and BQM-74E target drones in which the airspace is cleared for live target firing or tracking.

Further, the RQ-7B was sortied as a "Blue Force" ISR asset to familiarize Stennis intelligence specialists with the capabilities, limitations, employment, and integration of a non-organic unmanned aircraft.

The RQ-7B, like most Group III UAS, is a line-of-sight system; the full motion video feed is broadcast no more than ten miles or so from the UAS. In order for a CSG to leverage the video information, the feed must either be retransmitted or rebroadcast, or provide asynchronous data postmission. For most of the COMPTUEX and JTFEX, the Stennis CSG was some 100 miles from the RQ-7B operations area.

The 10th SFG was able to provide a combination of information back to the Stennis via mIRC chat and via annotated video stills of notional target areas sent over SIPRNET.

The live full motion video was not available for these Blue Force events, but the products provided by 10th SFG, including a post-mission report of targets covered, were a more than adequate work-around.

These methods, although not elegant, were effective in augmenting the strike group's ISR matrix. Levying a tactical, non-organic UAS against the beyond-line-of-sight needs of a CSG was representative of the types of challenges faced by multi-service employment of UAS.

Each service – Army and Navy – learned a great deal about the requirements and capabilities of the other, and about crafting on-the-fly solutions to shortfalls.

Conclusion

Overall, the RQ-7B deployment to COMPTUEX and JTFEX was a success. It exposed Navy exercise planners, deploying units, airspace controllers, and logisticians to aspects of UAS employment not always evident when drafting plans on paper.

With detailed airspace deconfliction and coordination, operation risk management planning, and tested communications plans, the RQ-7B Shadow operated safely in the restricted areas and ranges with other military aircraft operating simultaneously at their respective deconflicted altitudes.

This was a major milestone for the sailors and civilians of Fleet Air Control and Surveillance Facility San Diego, and the range controllers at the Southern California Offshore Range who worked closely with exercise planners and the 10th SFG to ensure a safe evolution.

The creation of new operations areas within existing ranges and airspace will provide the backdrop for future UAS sorties during pre-deployment exercises.

U.S. Third Fleet and Strike Force Training Pacific planners are actively searching the means to bring more UAS training opportunities to predeployment exercises.

Unmanned aircraft systems, operated by Allies and adversaries alike, will be a fact of life for every deploying CSG. Exposure to UAS tactics and employment will be a necessary part of every deploying unit's set of mission essential tasks.

Lieutenant Commander Will Gallaway is the deputy intelligence branch chief for the Joint Unmanned Aircraft Systems Center of Excellence at Creech Air Force Base, NV.

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he mission of the Army's Unmanned Aircraft Systems (UAS) Project Office (PO) is to provide affordable and combat effective unmanned aircraft and control systems through excellence in program management. The mission provides our nation and its Allies world class UAS and unmanned control systems interoperable with Army, Joint and coalition partners. UAS PO continues to modernize the Army's UAS fleet from the inside out, diligently working with industry partners to rapidly develop and install cutting edge unmanned aircraft technologies.

Using an underlying philosophy of continuing with quick reaction capability fieldings of current UAS, as well as retrofitting and resetting recently returned UAS with updated technology, UAS PO has kept pace with demands from their forward deployed combatant commanders.

The Rapid Integration and Acceptance Center (RIAC) located on Dugway Proving Ground, Utah further enables UAS PO to rapidly integrate and field payloads and technologies.

Small Unmanned Aircraft Systems (SUAS)

Unmanned aircraft continue to reshape how we fight our battles.

Few unmanned aircraft have made an impact more than the "small" class of unmanned aircraft. The Army relies heavily on the Raven and Puma SUAS.

Since December 2010, when the SUAS Product Office first received the order for a surge in Raven unmanned aircraft, they have been decisively engaged in the planning and implementation stages.

Planning efforts included "policing up" Raven systems from Continental United States non-deploying units, upgrading and refurbishing as necessary, then pushing them forward to the SUAS in-country facilitator who will ensure that units have sufficient numbers of trained operators.

Once a unit has trained operators, systems will be fielded to those units. The end goal of the "Raven Surge" is to ensure each brigade combat team will have 35 Raven systems (3 aircraft per system) to use versus the normal 15 systems.

The Puma All-Environment Small Unmanned Aircraft System has proven itself many times over as a critical piece of reconnaissance equipment for route clearance patrols (RCPs) in Operation Enduring Freedom (OEF).

Pumas and the Soldiers that operate them have time and time again been able to locate improvised explosive devices and potential ambush kill zones, miles before RCPs come into direct contact with the enemy.

This kind of "eyes beyond the horizon" intelligence has provided RCP commanders with valuable time and space to make critical decisions necessary to defeat the awaiting enemy and save American Soldiers' lives.

The success of the Puma has prompted a request for and initiation of a new Joint Urgent Operational Needs Statement to rapidly procure an additional 129 Puma systems (3 aircraft per system), to provide one for every maneuver company in theater. This surge of systems will allow the advanced capabilities of this SUAS system.

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Key members of the FS CAB aircraft taking part in the MUSIC Exercise, September 16, 2011 at Dugway Proving Ground, Utah.

UAS PO and the FS CAB

On Aug. 22, 2011, initial fielding of the first ever full spectrum combat aviation brigade (FS CAB) was accomplished. Two platoons of Shadow[®] UAS were fielded to the 101st CAB, 101st Airborne Division (Air Assault). As the 101st CAB makes its transformation to the Army's first FS CAB, the Shadow[®] is the first UAS to be incorporated into the unit's structure.

The new "hybrid" Aviation force structure leverages unmanned systems for the dull, dirty and dangerous missions while using manned aircraft in a Manned Unmanned Teaming (MUM-T) role. As part of the FS CAB, these two platoons will be afforded access to aviation mentorship unparalleled by any other Shadow[®] unit in the U.S. Army. This new partnership will also take Shadow[®] to new heights in the business of MUM-T.



One System Remote Video Terminal operators (Gary Grose and Harsha Rayapati) prove bi-directional capabilities during MUSIC Exercise conducted at the Rapid Integration and Acceptance Center (RIAC), Dugway Proving Ground, UT.

UAS Reduction of Ownership Cost (U-ROC)

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The UAS PO Technical Management (TM) division is charged with the mission of building cost predictability into UAS operations. The TM division has initiated a new cost savings focus area called UAS Reduction of Ownership Cost (U-ROC).

The efforts consist of multiple initiatives focusing on better buying power and horizontal integration amongst the varying UAS products.

One of the U-ROC initiatives involves standing up a Condition Based Maintenance (CBM) Program. The effort will be centrally focused on a software product called UAS-Maintenance (UAS-M), owned and developed by the government as a Government-Off-The-Shelf (GOTS) product.

The first iteration of UAS-M (2Q, FY12) is primarily a high fidelity statistical analysis tool that takes current flight sensor data and compares it to historical data on an individual tail number basis. The healthy baseline applies to a single aircraft, rather than applying a common model across an entire fleet.

With the increasing collection of flight data, UAS-M developers are able to create prognostic algorithms to detect impending failures on the aircraft, both during and post flight.

The user and maintainer are notified of the overall health status of the vehicle. The software co-exists with UAS' digital logbook (UAS-Initiative (UAS-I)) on a laptop. This ensures the correlation of flight data and maintenance data, allowing for on-the-fly recalibration of healthy baselines due to changes in components on the aircraft.

The initial capability will support Shadow[®] aircraft. After the initial release, UAS-M will begin development to support other UAS platforms, specifically Hunter and Gray Eagle.

This common tool reduces UAS ownership cost across the board, allowing for a single software baseline to support multiple products, a single maintainer responsible for CBM on multiple products, and having no licensing fees and development fees for maintenance and sustainment of the software.

With the maturation of the data collection process, refinement of prognostics and predicting remaining useful life (RUL) will be implemented incrementally.

The open architecture and modular design of the software allows for the seamless inclusion of third party developed capability.

One System Remote Video Terminal (OSRVT) and Interoperability

The One Shadow[®] Remote Video Terminal (OSRVT) payload control development effort has made significant progress over the last nine months. The system is now completing Class C handovers and payload control with Gray Eagle, Hunter, and Shadow[®] Currently, the system is preparing for formal hardware in-theloop simulation testing with Shadow[®].

flight testing withShadow[®] began July 25th and the system was demonstrated with Gray Eagle, Hunter and Shadow[®] as part of the Manned Unmanned Systems Integration Capability (MUSIC) Exercise in September 2011.

OSRVT Bi-directional capabilities via the Tactical Common Data Link (planned for FY13 fielding) and the Digital Data Link (planned for FY15 fielding) will allow the operator to control the payloads of both large and small air vehicles, which will provide faster situational awareness on the ground.

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Mr. Marty Shelton is a contractor

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UNMANNED AIRCRAFT SYSTEMS

TRADOC Capability Manager for Unmanned Aircraft Systems

ust ask any maneuver commander and you will hear emphatically, Unmanned Aircraft Systems (UAS) are changing the way we fight.

The concepts outlined in the Army's UAS Roadmap remain valid (as proven with the huge success at the recent MUSIC Demonstration, Dugway Proving Grounds).

All members of the Army's UAS enterprise remain committed to delivering the most effective systems while remaining cognizant of the need to achieve efficiencies at every opportunity.

Current UAS operator/maintainer training is just meeting our current requirements. Additional improvements are required in PME and embedded simulation to further UAS training, mission planning and execution.

TRADOC Capability Manager for Unmanned Aircraft Systems (TCM UAS) continues to increase UAS support to current operations while maintaining a focus on emerging UAS capabilities.

Across all echelons, Soldier operated UAS from the MQ-1C Gray Eagle to the RQ-11B Raven continue to provide timely and accurate information to commanders and Soldiers engaged in combat.

The following article provides an update of current Army UAS Programs of Record and an overview of the Medium Range Multi-Purpose (MRMP) Vertical Take Off and Landing (VTOL) UAS as an emerging capability.

By COL Robert J. Sova

Family of Small Unmanned Aircraft (SUAS) RQ-11B Raven and Puma

The Army's main Small UAS (SUAS) is the RQ-11B Raven, a stand alone man-portable system designed to provide organic tactical RSTA, force protection, and SA/SU for the small unit leader. Another SUAS organic to the deployed units in OEF is the Puma. The Raven and Puma provide real time full motion video (FMV) from the electro-optical (EO) and infrared (IR) cameras to the SUAS operator and also One System Remote Video Terminal (OSRVT).

The Raven and Puma are designed to be operated by a Soldier of any MOS that has received the appropriate approved training. This training consists of general operation and troubleshooting, maintenance, and airspace awareness.

Both Raven and Puma Unmanned Aircraft (UA) generally fly at 500 ft AGL for 1-2 hours depending on which UA is used. The Raven and Puma are organic to maneuver and maneuver support forces from the battalion down to the platoon.

Near term upgrades to the Raven will be a gimbaled EO and IR payload offering a mechanical pan, tilt, and zoom payload with improved optics.

Raven UAS

Other Raven improvements are located in the Rucksack Portable Unmanned Aircraft System Capability Production Document (RPUAS CPD) currently undergoing HQDA staffing. Puma is not an Army program, but has been acquired to fill operational gaps in OEF.

One System Remote Video Terminal (OSRVT) Increment II

The OSRVT provides the Soldier and commander with real time full motion video (FMV) from Army UAS (Raven, Puma, Shadow, Hunter,



One System Remote Video Terminal

when their terrain changes by the terrain cha

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WASP UAS: RAVEN PUMAAE Around an embankment, beyond the horizon, or over the sea, continue to gather critical data undetected without putting your troops or civilians in harm's way. Each AeroVironment UAS is uniquely designed to maximize results without compromising the mission. Be prepared for any situation with our family of UAS ready for your deployment today.

> RANGE - 5 km ENDURANCE - 45 minutes WEIGHT - 0.95 lbs (430 g)

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RANGE - 10 km ENDURANCE - 60-90 minutes WEIGHT - 4.2 lbs (1.9 kg) DDL DATA LINK - Digital

WASP

RANGE - 15 km ENDURANCE - 2 hours ENDURANCE - 2 hours WEIGHT - 13 lbs (5.9 kg) DDL DATA LINK - Digital



and Gray Eagle), and select manned platforms (AH-64D, OH-58D, and F-15, F-16, F-18 with Lightning Pods).

The FMV displayed on the OSRVT enhances the situational understanding/awareness (SA/SU) by providing a "bird's eye view" of the battlespace for the Soldier and commander.

Another key component of the OSRVT is the ability to control the EO/IR payload of Shadow, Hunter, and Gray Eagle Unmanned Aircraft (UA) known as Level of Interoperability (LOI) 3. This payload control allows the Soldier to direct the payload from the OSRVT to support the commander's battlefield tactical information requirements.

The ability of commanders and Soldiers to view and control the payload at the small unit level enhances manned/unmanned teaming by allowing air and ground crews to view the same target of interest simultaneously for a coordinated surveillance or engagement; reducing the risk of collateral damage and significantly shortening the "sensor-to-shooter" timeline.



carries a laser designator, allowing Shadow operators to prosecute precision guided missile engagements.

Each Shadow platoon will receive two POP 300D payloads with 43 payloads fielded to date. The addition of extended wings (from 14 to 20 feet), and resultant increased fuel storage capacity increases mission endurance time from six to nine hours and allows for expanded payload capability.



RQ-7B Shadow

The Shadow RQ-7B UAS is the Army's tactical "workhorse" UAS supporting brigade combat team (BCT) operations. As a fully integrated, organic asset, the RQ-7B provides the ground commander with tactically significant situational awareness and the ability to influence operations in a timely manner. The Shadow system has compiled over 650,000 flight hours since its initial fielding in early 2003.

The Army fielded the 97th Shadow system this September. A continued program of improvements is increasing Shadow's organic capabilities. The Plug-in Optronic Payload (POP) 300D Shadow operational security is enhanced with the addition of the Type Two Tactical Interim Encryption System (TIES). TIES is an interim solution to encrypt the video downlink data and deny the enemy the ability to intercept tactically relevant information ahead of the Congressionally-mandated Tactical Common Data Link (TCDL) solution.

A major milestone in the Shadow program is the introduction of Shadow as a full member of the full spectrum combat aviation brigade (FS CAB). This September, the Army began fielding C Troop, 2nd Squadron, 17th Cavalry Regiment, 101st CAB, with two Shadow platoons. This Shadow troop will conduct habitual manned/unmanned operations (MUM-O) which will significantly improve the maturation of MUM-O concepts.

TCM UAS is working in conjunction with TCM Reconnaissance/ Attack, USAACE DOTD, and other agencies to develop tactics, techniques, and procedures in support of the FS CAB's Shadow troop.

The first platoon received their equipment in early September with the second platoon scheduled to receive their equipment in October.

MQ-1C Gray Eagle Unmanned Aircraft System

The U.S. Army's new UAS is the MQ-1C Gray Eagle to be fielded as an independent company assigned to the CAB. As an organic divisional asset, it executes reconnaissance, surveillance, security, attack, and command and control missions to provide dedicated, mission configured UAS support based upon the division commander's mission priorities.

Recent efforts to increase direct mission support resulted in a Vice Chief of Staff, Army approved "Balanced Platoon" concept that will provide increased flexibility and a six simultaneous and continuous mission capability through application of new technologies and small increases in equipment. The Gray Eagle Company is resourced with 128 Soldiers.

Initial operational capability (IOC) of the first unit equipped (FUE) is planned for 2nd Qtr, FY12. Two quick reaction capability (QRC) systems were developed to fill tacticalreconnaissance, surveillance, target acquisition/intelligence surveillance
reconnaissance (RSTA/ ISR) gaps until the program of record system is fielded. QRC1 and QRC2 remain deployed in theater supporting current operations. Development of a plan to transition from the current configuration to the Balanced Platoon will be a main program effort.

Integration of future payloads (SAR/GMTI, SIGINT, WIN-T, and JTRS) and transition to a Universal Ground Control Station are all planned for this increment consisting of fifteen companies for the active Army, and two systems for Army Special Operations Forces (ARSOF).

Medium Range Multi-Purpose (MRMP) Vertical Take-Off and Landing (VTOL) UAS

The Army's UAS Roadmap lays out a conceptual way ahead that includes an unmanned aircraft with greater range, endurance, and payload capacity than today's tactical UAS and with the capability to launch and recover without improved runways.

Army BCT commanders must constantly monitor their environment and rapidly identify potential threats such as high-value individuals, small teams of irregular forces, and improvised explosive devices.

Specific Army capability gaps that result from insufficient organic/direct support airborne ISR include degraded situational awareness; the inability to accurately detect, identify, and track targets on a routine basis; and the inability to dynamically re-task, cross-cue, and reposition sensor capabilities. These gaps are documented in the Joint Direct-Support Airborne ISR (JDSAISR) Initial Capability Document (ICD).

The Army envisions a vertical takeoff and landing (VTOL) UAS that allows for flexible basing to maximize time on target and platform capability with the ability to move fast and adjust aspect and gazing angles. TCM UAS has begun analysis and development of a Capabilities Development Document (CDD) for a MRMP VTOL UAS and is a cooperative member of the Navy's Medium Range Maritime Unmanned Aircraft System (MRMUAS) Analysis of Alternatives.

The Navy also has documented gaps in the ability to provide surveillance and reconnaissance to their Special Operations Forces and the Navy surface warfare forces in the execution of counter-piracy missions and the ability to conduct persistent airborne ISR.

Once developed, the MRMP VTOL UAS will most likely be incorporated in the FS CAB and aerial exploitation brigade (AEB) in support of BCTs with the ability to land and take off from a BCT's location in both urban and complex terrain for refueling, rearming, sensor change out and light cargo delivery.

The MRMP VTOL will provide sensors to include EO/IR, Synthetic Aperture Radar/ Movement Target Identification (SAR/MTI), Light Detection and Ranging (LIDAR), Forest Penetration (FOPEN), Hyperspectral and Signals Intelligence (SIGINT).

The three primary mission profiles of the MRMP VTOL UAS are the reconnaissance/armed, multi-sensor payload, and light cargo.

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COL Robert J. Sova is the TRADOC Capability Manager for Unmanned Aircraft Systems, at Fort Rucker, AL.



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Working the Hunter ground control station at the Unmanned Aircraft Systems training battalion, 2nd Bn., 13th Avn. Regt., Fort Huachuca, AZ.

A Revolutionary Program in the Aviation Portfolio UAS Warfighter Forum brings open dialogue with all the stakeholders

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By Sofia Bledsoe

ore than 400 attendees gathered at the Unmanned Aircraft Systems Warfighter Forum which ran from June 21-24 in Tucson, AZ. Now in its 11th iteration, the invitation-only gathering is an annual opportunity for attendees to confer openly with each other and discuss issues to identify what the Army has done right, what it can improve, and encourages the free flow of ideas, all in support of the Soldier.

"This forum is focused on increasing the effectiveness and efficiency and the actual employment of UAS," said Tim Owings, deputy project manager for UAS.

"It's a very unique venue in that we bring together active warfighter, national guardsmen, acquisition professionals, other government agency professionals and our original equipment manufacturers to have this open dialogue and exchange of information. A lot of good information has come out of this."

People and Efficiencies

SGM Loren Gray, Operations and Force Design Director from Fort Rucker and first time attendee, said the most-value added aspect of attending the forum was the opportunity to learn how each organization and what it does affects other people.

"Sometimes it is easy to get caught up in your own mission that you forget the ramifications of a decision that your organization has made," he said.

Because Gray manages personnel, his main concern with the explosive growth of UAS is how it affects people. "How does that widget affect the Army? Are there enough trainers and equipment to support the training mission? How does it all sync?

That's why I'm so glad we're all able to talk to one another and meet face-to-face in the same place at one time which has really helped to support my organization's own mission."

Attendees included UAS operators from 19 units including Army National Guard and Marine Corps representatives, 20 Army and DoD organizations, four other government agencies, and five of the UAS project office original equipment manufacturers.

The Only New Aviation Acquisition

During his keynote speech, MG William T. Crosby, Program Executive Officer for Aviation called UAS "revolutionary." "We're not



MG William T. Crosby, Program Executive Officer for Aviation, speaks to attendees at the Unmanned Aircraft Systems Warfighter Forum in Tucson, AZ June 23. Calling Army Aviation the ground Soldier's critical enabler, Crosby told the audience that UAS has changed the way the Army thinks, fights and engages the enemy. "What I care about is that everything we do is focused on getting that data to those guys down there," Crosby said. "We don't just talk it, we walk it."

buying anything new except for UAS," he said. The way the Army thinks, fights, and engages with the enemy has evolved since the incep-

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tion of UAS and has made the Army even more efficient and effective.

"What I'm really proud of is that they brought UAS and put them under PEO Aviation that allows that synergy across all platforms," Crosby said. He elaborated on the efficiencies brought on by the teaming of manned and unmanned aircraft that is driving the way the Army fights.

"There are so many aspects and potential that this team deserves all the credit and has enabled this great thing to happen."

A Busy Year

Owings shared some highlights in the past year, including the Common Systems Integration Product Office, which lead the efforts on the highly successful Manned-Unmanned Systems Integration Capabilities (MUSIC) exercise that took place on September 16 at Dugway Proving Ground in Utah.

They've successfully completed ROVER-6 design verification test with National Safety Agency oversight. The ROVER 6 is the next generation of ROVER portable radios that transforms sensor-to-shooter networking and allows increased levels of collaboration and interoperability.

In addition, the office is also supporting the Kiowa Warrior Product Office with their Level 2 Manned-Unmanned integration, or L2MUM – which means that the pilots in the cockpit can view feeds from nearby unmanned aircraft systems in real time.

RIAC Up & Running

In April 2011, construction was completed for the new Hunter and Warrior hangars at the Rapid Integration and Acceptance Center (RIAC) at Dugway Proving Ground, Utah.

Since its groundbreaking ceremony in October 2009, the RIAC has supported numerous off-axis test events, some of which include the Heterogeneous Airborne Reconnaissance Team system or HART – which enables soldiers to collect video from aircraft and display it on their mobile computing devices – damage tolerance test of the Shadow which proved the aircraft's capability in flight even after portions of the wing was blown off; HELL-FIRE tests from the Gray Eagle, and many others.

In May 2011, the Army became the



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first service authorized to begin night flights of a UAV. The Army's first flight was with the Gray Eagle using the Ground-Based Sense and Avoid System at El Mirage, CA.

Under a certificate of authorization with the U.S. Federal Aviation Administration, the project office, in coordination with the FAA, the Army Airworthiness Authority and General Atomics, has collected significant data from the flights which will be another great step for Army UAS to fly in national airspace.

High OPTEMPO

"We continue to fly at a very high optempo with over 1.2 million flight hours, 90% of those continue to be in combat operations," said Owings.

"The major points for all of this is that the demand for UAS is continuing to increase whether we're talking additional intelligence, surveillance and reconnaissance (ISR) roles or in attack missions but really across the spectrum we're seeing increasing uses of systems," Owings continued.

"The technologies for the next generation of stuff are starting to come to fruition and allow us to advance ourselves into things like 4G networks,



smart phones and lower cost ways of producing end product to dislocated users."

In addition, as the Army continues to train more Soldiers, they are also learning a lot about these systems and are very open in the exchange of information to make them better.

"For us, the Army has come a long way for UAS but it is still in its infancy in terms of what's going to be happening over the course of the next few years," said Owings.

Crosby encouraged the audience to

take advantage of the opportunity to learn from representatives in other services and organizations. "What we're talking about is that bond of trust," he said. "Learn from your brothers in the other services and build on those synergies to make these systems better."

Sophia Bledsoe is the public affairs officer of the U.S. Army program executive office for aviation at Redstone Arsenal, AL.

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n the November 2010 edition of Army Aviation, the 164th Theater Airfield Operations Group (TAOG) and the Air Traffic Services Command (ATSCOM) were highlighted in the "Command Sergeant Major Update."



Describing the roles and missions of both organizations as it related to Army Aviation's transformation and illustrating the focus areas of each, the article clearly demonstrated the relevance and value of Air Traffic Services (ATS) to the ongoing efforts in support of combat operations.

At the time of that printing, the 164th TAOG was six months into its 2010-2011 deployment, having recently redeployed from its 2008-2009 deployment.

With a short turnaround between deployments, it may be expected that the tasks, priorities, and initiatives would have been very similar to those of the previous deployment.

On the contrary, the 2010-2011 deployment was strikingly different.

Theater Airfield Operations Group

The TAOG remains a relatively new organization within the Army, having been activated only four years ago. Conceptualized, among other things, to help remove the combat aviation brigade commander's burden associated with managing airfields, a TAOG has been continuously deployed in support of Operations Iraqi Freedom, Enduring Freedom, and New Dawn since 2008.

During the 2010-2011 deployment, the TAOG conducted its doctrinal mission set of leading airfield operations battalions (AOBs) in Iraq, Afghanistan, and Kuwait.

The TAOG, as expected, was also deeply immersed in the strategic planning for both the ATS redeployment from Iraq and the continual development of airfield priorities in Afghanistan.

Through frequent interaction with the staffs of USARCENT, USF-I, and USFOR-A, the airfield and air traffic control initiatives were effectively synchronized.

What made the deployment strikingly different, however, was the significant need for airfield management skill and an operational understanding of senior airfield authority (SAA) functions.

In fact, as the deployment pro-

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Mr. Mark Hampton, ATSCOM Fixed Base Division, Discusses Pavement failure issues during the classroom phase of the Airfield Management Workshop hosted at Fort Rucker in Aug. 2011.

gressed, it became clear that the ability to manage airfields was an extremely valued skill and was not even remotely a task reserved only for air traffic service providers.

Preparing for Operations

Upon TAOG's arrival in theater, only one AOB was operating in Iraq/Kuwait and no AOBs were operating in Afghanistan.

Although an AOB was inbound to Afghanistan and destined to provide SAA and airfield management for two airfields in two separate regional commands, there was time for the TAOG's Air Traffic Services Standardization Element (ATSSE) to set the conditions for their arrival.

Stated another way, the TAOG's ATSSE was able to put theory into practice. Beginning by discovering the airfield's future plans, the ATSSE began the process of ensuring that everything necessary to run the airfield would be available when the AOB arrived.

From contracting office space containers to procuring flight line vehicles, the ATSSE members worked tirelessly to ensure that the AOB's Soldiers would be able to hit the ground running and provide the airfield services required.

Not surprisingly, the experience of setting the conditions for the inbound AOB's airfield management element provided tangible lessons learned and real-world examples that served as a proof of principle into the content associated with airfield management training. The experience gained through spearheading airfield management requirements in Afghanistan proved more valuable than might have been expected.

Since the number of Army-managed airfields far exceeded the operational capability of ATS units (one airfield management element per AOB and no organic airfield management element in an ATS Company resident in a general support aviation battalion (GSAB)), more and more Army Aviation formations are required to manage airfields.

As noted in the Army Aviation article (November 2010), "to effectively employ Army Aviation and facilitate the

Airfield Management MTT Training Outline

DAY1	DAY 2 Airfield Management 101	
Current ATS Posture (Theater Specific)		
Current Airspace Picture (Theater Specific)	UFC Requirements	
Theater Specific Approaches	SAA Roles and Responsibilities	
Theater SME Brief on Lessons Learned	Airfield Specific ATS Overview / Posture	
Open Forum for Questions	Open Forum for Questions	
Table 1.		

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."

Training Up

Not surprisingly, this poses some issues, especially when there is no resident professional training associated with airfield management and SAA in the Army. According to Mr. Mark Hampton, the primary trainer and coordinator for ATSCOM's Airfield Management Workshop:

...the Army's approach to satisfying airfield operations and management has been exclusively focused in supporting Army Aviation and the airframes inherent to its force structure. Unfortunately this approach does not adequately equip, man, or train the Army to operate seamlessly when supporting joint and coalition airfield operations so prevalent today.

These joint and coalition operations are requiring Army Aviation Soldiers to adapt to their surroundings, acquire new skills, develop material solutions, and perform in areas not intrinsically associated with Army.

To reconcile this lack of formalized professional training, ATSCOM continues to provide a Contingency Airfield Management Workshop twice annually at Fort Rucker.

To provide airfield management training tailored specifically to units in the deployment cycle, ATSCOM, in conjunction with recently redeployed TAOG SMEs, will travel and provide airfield management in a mobile training team (MTT) format. A basic training outline for this mobile training is shown in Table 1.

ATSCOM continues to work with USAACE in developing the way forward for airfield management training, but until a formal training program is adopted, ATSCOM will continue to offer orientation training to those facing airfield management tasks in the future.

To date, ATSCOM has hosted three airfield management workshops at Fort Rucker; the most recent workshop concluded at the end of August 2011.

Additionally, small training teams composed of SMEs from both ATSCOM and the 164th TAOG have provided airfield management training to CAB leadership at Fort Hood and Fort Bragg; more visits to other installations are currently being planned and coordinated.

MAJ Todd H. Marshburn serves as the operations officer for Air Traffic Services Command (ATSCOM) at Fort Rucker, AL.

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ncreasingly, our aviation formations are being asked to perform airfield management duties but, unlike our airfield operations battalions (AOB) with an organic airfield management element, these aviation units must learn how to manage the airfields and all of the associated requirements while, at the same time, perform their combat missions.

To add more complexity, it is not unlikely that the commander of these aviation units be designated as the Senior Airfield Authority (SAA) for the airfield or airfields from which they operate.

The overall responsibility for airfield management goes to the SAA and traditionally during contingency operations, SAA responsibility was given to the Air Force. The sheer number of SAA requirements in the current fight, however, has resulted in SAA roles often being nominated to Army commanders.

Doctrinally, the SAA is the component responsible for the control, operation, and maintenance of the airfield to include the runways, associated taxiways, and parking ramps as well as land and facilities whose proximity affects airfield operations.

To do this, the SAA will develop and coordinate airfield improvement



1-245th AOB Command Team joined by some of the many agencies responsible for the runway project at Tarin Kowt conducting ribbon cutting ceremony.

master plans with the Base Operating Support-Integrator (BOS-I).

Perhaps most important, the SAA controls flight line access and is responsible for the safe movement of aircraft in the airport traffic area and on all airfield services.

To be effective, an SAA must understand the combatant commander's mission and should have a wide variety of aviation, management, and air traffic services (ATS) experience.

The SAA needs to be able to develop effective relationships with organizations on and off the airfield in order to prioritize efforts to support the combatant commander's mission, to effectively plan for the future of the airfield, and to successfully integrate safety in every process. Stated another way, it is the SAA's responsibility to understand and balance the immediate tactical event, the operational need, and the strategic plans to ensure that the effects are positive or that the risk is mitigated to its lowest level.

The Keys to Success

To be successful, the SAA needs a competent team to interface with the many functions associated with airfield operations. Ideally, the SAA will have a robust Airfield Management Element (AME) to manage the day to day operations of the airfield.

This AME, however, may be an ad hoc team cobbled together from the aviation task force. Regardless of the composition, the AME will need to focus on safety, standardization, construction, future development, airspace management, Movement Control Team (MCT) / Approach Departure Airfield Control Group (ADACG) oversight, coordination with external agencies, airfield services, Airfield Response Team (ART), and Base Operations. These broad areas involve some critical tasks, which are described below.

Safety: A safety council must be established and in order to provide



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invaluable coordination among the airfield and external agencies. Flight line drivers programs must be established. Local national contractors may be unfamiliar with aviation industry or aviation safety, so educating contractors/workers on the hazards involved with short landings or failure to take off prior to work zones is required. Procurement of safety deficiencies (signs, lights, wind socks, etc.) is often a complicated process and may require extensive coordination efforts with host forward operating bases (FOBs).

Communication with all external agencies (e.g., contractors, tenant units, base defense, etc.) is imperative in order to capture any incidents that need to be included in the Hazard tracking logs. Additionally, a Foreign Object Damage (FOD) program must be vigorously enforced.

Future Development/Construction: In

some cases, there may be many construction initiatives ongoing or planned for the future. In an immature theater, the SAA may inherit an airfield in the process of being completely reconstructed. In these cases, it is likely that there will be much effort spent coordinating with contractors, engineers, and base organizations to ensure some operational capacity continues without closing the airfield.

Coordination, training, safety, and airfield procedures are paramount for simultaneous airfield and construction operations; real time de-confliction between construction workers, construction equipment and aircraft operations will likely take place every day.

Communications: Obviously, redundant communications are optimal.

Not surprisingly, it is necessary to aggressively seek additional/alternative means to communicate with tower, inbound/outbound aircraft, and emergency services.

Airspace Management: The airspace associated with the airfield is often dynamic and restricted operations zones (ROZs) may affect the airfield's airspace; so, it is incumbent on the airfield managers to remain in direct contact with the ground commander's Fires Cell in order to coordinate and de-conflict all of the different ROZs that have an impact on arriving and departing aircraft.

This is a fairly easy process if the

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fires are preplanned; however when it involves short-notice, there must be real-time coordination between AME, tower, and the Fires Cell.

Coordination with External Agencies:

It is necessary to make contact with all of the external agencies that need access to the airfield, including the aviation units that stage out of the airfield. It is not uncommon to provide training to external organizations that may lack understanding of the nuances of the airfield and this is typically a continuous process as the airfield grows in both capability and user density.

Movement Control Team (MCT) and Arrival/Departure Airfield Control Group (ADACG) Management:

Airfield users are typically responsible for their specific needs.

In multinational environments, countries may utilize their own movement control teams to handle passenger and cargo for their aircraft. No matter the situation, it is important to understand cargo handling requirements and passenger manifesting procedures, associated with the airfield.

Force Protection: Not surprisingly, force protection is vital. Depending on the maturity of the airfield, there may be some significant challenges associated with it. For example, if there is no airfield fence or barrier to separate the FOB from the airfield, specific measures must be taken to ensure the security of the airfield.

It is not uncommon for vehicles or animals to enter the runway environment and vigilance is required. Coordination with the Base Defense Operations Center (BDOC) with respect to clearing the airfield (including runways, taxiways, and parking ramps) will ensure that incursions are minimized and that the airfield remains operational to the maximum extent possible.

Base Operations: A fully operational base operations can coordinate with all of the airfield services, support requirements, and external agencies. Base operations updates NOTAMs, approves fixed-wing PPRs, coordinates with the Fires Cell for ROZ operations, and synchronizes Airfield Response Team (ART) actions.

Contract Oversight: The sheer number of tasks associated with airfield

management and the scarcity of units capable of performing these tasks may require contracting.

In mature theaters with mature airfields, a majority of the roles may be performed by contractors. For example, civilian contracts for air traffic control tower services, Airspace Information Center operations, airfield services, airfield management, fuel services, crash fire rescue services, and airfield maintenance are not uncommon.

In immature theaters, however, many contracts pertaining to the airfield are either part of a much larger contract or managed by the airfield engineer or FOB Mayor Cell. Having a contracting liaison officer will likely pay huge dividends with respect to procuring equipment. More importantly, a trained Contracting Officer Representative (COR) is vitally important. All of the airfield's contracted services will be analyzed and inspected by the COR.

Although the SAA will have no command authority over the contractor personnel, the SAA will exercise its authority through audits of the contracts. Stated another way, the COR should ensure compliance with contract requirements and also ensure compliance with military regulations.

Conclusions

As the current fight has demonstrated, we see the need for an operant understanding of the responsibilities of SAA, the critical tasks associated with airfield management, and the duties associated with contract oversight. In fact, as the Army is finding a niche in managing airfields, it becomes increasingly clear that these responsibilities are becoming the norm and will continue to be a requirement into the future.

By keeping some of these ideas in mind if given the responsibility to manage an airfield, those newly designated as SAA will be at the best possible starting position as they navigate an extremely steep learning curve.

- * * -

LTC Jon R. Greenhaw served as the commander of the 1st Battalion, 245th Aviation Regiment (Airfield Operations) and MAJ Todd H. Marshburn served as the operations officer for the Task Force 164th Theater Airfield Operations Group both deployed in support of Operation Enduring Freedom at Tarin Kowt Airfield, Afghanistan.

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AIR TRAFFIC S E R V I C E S

n 1929 St. Louis airport hired the first air traffic controller to stand in a prominent location on the runway and use green and red flags to communicate with the pilots. Military air traffic controllers were first hired by the Army in 1943 to track military aircraft, and by 1944 had 23 flight control centers of its own.

Today, the Product Management Office for Army Air Traffic Control (PM ATC) is chartered with the acquisition, fielding, and life cycle responsibilities of the systems that support aircraft movement at tactical and fixed base airfields around the world.

Our Systems and Facilities

PM ATC's systems and facilities include radars (Digital Airport Surveillance Radar, AN/TPN-31 Air Traffic Navigation, Integration, Coordination System (ATNAVICS) and Fixed Based Precision Approach Radar), airspace management (Tactical Airspace Integration System (TAIS)), towers (Mobile Tower System), control systems (Tactical Terminal Control System (TTCS)), and all the automation equipment (radios, display systems, voice recorders, automation systems, and switching systems) at Army airfields worldwide.

ATC systems of today are the results of the evolution of modern avionics and the technology advances in air traffic control equipment.

In the Beginning

The introduction of the helicopter was the primary driver of Army tactical ATC NAVAID development. Since the Army acquired its first helicopter, the H-13 Sioux in 1947, early Army helicopter operations were conducted using visual flight rules (VFR) and did not operate at night or when weather presented unfavorable meteorological conditions.

The aircraft did not depend on Army ground based (from a tactical perspective) navigational aids (NAVAIDS) until the late 1950s and early 60's (primarily automatic direction finder (ADF) and tactical radio beacons).



The operational peculiarities of rotary wing aircraft dictate a specially adapted navigational aid and surveillance system to better monitor maneuver at lower altitudes and speeds associated with helicopter operations.

Radar

Although radar has been available since the late 1940's, its primary tactical ATC function is to support instrument flight rule (IFR) operations and allow radar recovery in the event of inadvertent meteorological conditions (IMC).

Today's AN/TPN-31 ATNAVICS provides a tactical mobile surveillance and precision approach capability in all meteorological conditions.

PM ATC is working with the US Marine Corps / PMA 213 to increase the effective range of the ATNAVICS sensor to an objective 60 km.

Soon the ATNAVICS will share its air track information with TAIS to merge onto the TAIS air picture.

Airfield Lighting Systems

PM ATC has just finished fielding new airfield lighting systems at three airfields in Afghanistan. This will provide non-instrumented approach capabilities via a Precision Approach Path Indicator (PAPI), allowing pilots to execute visual approaches during low light conditions.

Mobile Tower System (MOTS)

To replace the 7A Tower, a contract is soon to be awarded to build the initial Mobile Tower Systems. The first of these modern, state of the art mobile air traffic control towers are planned to begin fielding in 2013.

Satellite Based Navigation

Today's air navigational environment is radically different than just 10 years ago. PM ATC works closely with Air Force, Navy, and FAA on several common programs moving to satellite based navigation and selfreporting technologies.

The *Joint Precision Approach and Landing System (JPALS)* is a prime example of a next generation navigational aid and landing system that employs the accuracy of GPS and addresses the operating characteristics of Army rotary wing aircraft and brings shipboard landings.

The FAA *Next Gen* program is monitored to fully understand and implement those technology initiatives in alignment with the upgrades to the Army aircraft avionics.

NextGen is a Congressionally-mandated transformation of our Nations' air transportation system, a foundation being the conversion of air traffic control from a terrestrial (radar) network to a satellite-based system. DESIGN I MANUFACTURING I PERFORMANCE I VALUE I QUALITY

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The AN/TPN-31 Air Traffic Navigation, Integration, Coordination System (ATNAVICS) provides a tactical mobile surveillance and precision approach capability in all meteorological conditions.

Most promising is *Automatic Dependent Surveillance – Broadcast (ADS-B)* and the enhanced situational awareness that this positional "selfreporting" information will bring to the air traffic controllers and to the tactical Aviation and Air Defense units needing accurate aircraft identification and positional data.

Mode 5 and Mode S are future aircraft self-reporting means that will also enhance mission effectiveness and situational awareness through interrogation by ATNAVICS and passive reception.

Airspace Management and TAIS

As advancements in computing and communication technologies continue to rapidly progress, so does Army Airspace Management. In 1999 the XVIII Airborne Corps conducted a Warfighter exercise with the usual ATC complement to include paper maps, acetate overlays, grease pencils and tape lines.

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There was also a new addition called the Tactical Airspace Integration System (TAIS). The TAIS consisted of a radio suite, integrated intercom, and radio switching capability and voice recorder, native radar interfaces, and a digital processing system that would immediately display the airspace, air tracks, airspace requests, and conflicts in 3D. This new processing capability revolutionized airspace deconfliction and made acetate and grease pencils a thing of the past.

In 2009, another revolutionary leap in airspace management for the Army was made by the introduction of a web service powered, Windows XP based, version of the TAIS. This combined cheaper, faster, and more portable hardware with the deployment of the Dynamic Airspace Collaboration Tool (DACT) thin client, capable of running on any web browser equipped computer on the tactical network.

A user could now navigate to a web page and a Java thin client would provide a near-realtime, 3-D globe based view of the current, planned, and requested airspace, as well as situational awareness tracks, while allowing the user to graphically submit new requests for airspace.

In 2012 and beyond, TAIS users will benefit from smart phone and tablet based applications that with the touch of a button and instant down-



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load from the DoD App store will extend the power of TAIS capabilities and airspace management instantaneously into the hands of the user.

Expanding ATC Logistics

Aviation missions have been constantly evolving with numerous coalition forces conducting joint operations using U.S. Army managed airspace. Maintaining satisfactory operational readiness rates across U.S. Army air traffic control systems has never been more difficult, as aviation OPTEMPO remains very high.

The keys to maintaining fleet readiness while reducing total ownership costs, is to maintain a solid experience base of Soldier/Maintainers and to quickly leverage new sustainment technologies. To reduce the expensive contractor footprint, MOS 94D support roles must be expanded to be mobile and highly skilled.

Most important is the ability to have worldwide reach-back to contractor maintenance knowledge management systems. Another training aspect being evaluated for optimization is the 15Q course.

Numerous hardware and software technologies exist that have the abili-

ty to provide life cycle managers (LCM) with the ability to "forecast failures". Failure forecasting is invaluable to reducing spares requirements and reducing scheduled and unscheduled maintenance.

The product manager is currently evaluating the application of these new technologies through a condition based maintenance project, in addition to exploiting test and push package strategies to improve life cycle support.

It is paramount that our LCM strategies be routinely optimized, to ensure success while conducting current and future combat operations as well as Department of Homeland Security support operations.

The Future

The next year will bring an increased soldier focus built on more frequent communication with field users, seeking feedback and quick resolution of any system problem or training issue. Higher operational readiness rates will be a major priority.

ATC proficiency through a common ATC Simulation System is envisioned as a reality in the near future.

As with all other Army Acquisition organizations, PM ATC must comply



1st Bn., 58th Airfield Operations Battalion Tactical Airspace Integration System (TAIS) at Baghdad Radio.

with new/revised acquisition policies and mandates enforced on programs, including Information Assurance/network security, Program Protection, corrosion prevention, all while trying to manage resources in a fiscally constrained environment.

Air Traffic Control is and will continue to be an interesting blend of the old and the new – ever ready to support and enable the aircraft of Army Aviation.

LTC Michael Rutkowski is the U.S. Army product manager for Air Traffic Control located in Huntsville, AL.



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Building Capability and Capacity through Partnering

By COL Kenneth T. Royar and CW5 Guillermo A. Soto Jr.

he Regional Command-South commander's intent was clear – partner to increase Afghan National Security Force (ANSF) capability and capacity.

While we knew our brigade (the 159th Combat Aviation Brigade (CAB) – Task Force Thunder) would not have any official designated partners, we took it as an implied task to reach out and partner where we could in order to help build the capacity of the ANSF.

Our Pathfinders partner with the 2nd Afghan National Civil Order Police (ANCOP) SWAT team in Kandahar as well as the 4th Kandak (battalion), 2nd Brigade, 205th Afghan Corps of the Afghan National Army and the Surrie District Police in the Zabul Province.

At the brigade level, our primary partner is the Afghan Air Force's



Kandahar Air Wing and is the focus of this article.

After partnering with multiple ANSF units over the past six months, we are convinced that while there are challenges in partnering, it is a task CABs must prepare for and execute in order to accomplish the mission. The implied task to partner was not a surprise.

Participating in the 10th Mountain Division's Mission Rehearsal Exercise academics and subsequent exercise enabled the Brigade to fully understand the commanding general's intent and prepare accordingly.

As a result, we specifically requested to discuss partnership during our Battle Command Training Program Seminar and were able to have the NATO Training Mission–Afghanistan (NTM-A) mentors to the Air Wing



An Iftar dinner for the Kandahar Air Wing was hosted by Task Force Thunder.

attend as well. We believed that partnering was such an important mission that it was deliberately listed as a key task in our deployment order.

We were not alone in the partnering process as the Kandahar Air Wing already had mentors — the 738th Air Expeditionary Advisory Group (AEG).

The 738th AEG was already on the ground in Kandahar, assisting and advising on everything from pilot training to aircraft maintenance.

Our aim from the start was to complement their actions while bringing to bear the capabilities and resources of the CAB in order to help increase the capability of the Air Wing.

We were also not starting from scratch as the 101st CAB, the unit we replaced, had started interacting with the Air Wing prior to our arrival.

In addition, we also drew from several successful partnering programs that the 3rd CAB had previously developed and executed in Regional Command-East. Despite having a great starting point, challenges remained. Relationships matter with the Afghans and successful relationships take time to cultivate.

Additionally, the size of the Afghan Air Force is dramatically smaller than its Army and Police counterparts they support, and this required realistic expectations on their capability.

Finally, unlike most ground units, there was no official partnership program for the Afghan Air Force so we were entering new territory. NOV 11 Section 2 with alternate article_June04.qxd 11/10/2011 9:43 AM Page 55

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Building Relationships

Immediately upon arrival we worked with the 738th AEG to build a relationship with the unit's leadership and their formation. Our initiatives included visiting the Air Wing's facilities as well as their reciprocal touring of ours.

Over numerous visits, their leadership saw not only the Brigade's aircraft, but also our maintenance facilities and tactical operations centers.

Our transparency and recognition of them as true partners helped to break down barriers and gain commitment to our offers of assistance. Relationship building is not a single event though – it takes time and continual effort.

As a means to continue fostering good relations, the Brigade hosted an Iftar dinner for the Air Wing during Ramazan which occurred during August this year. During Ramazan Muslims fast during the day and Iftar is the dinner meal served immediately after sunset. Over 40 Afghan Air Wing officers and noncommissioned officers attended the dinner.

The Brigade's Soldiers who interacted with the Air Wing also took an active effort to learn and use as much Dari and Pashtu as possible. Over time, the Brigade and Air Wing gained a mutual trust and understanding that enabled our combined operations.

Expectations

The Kandahar Air Wing's Tashkiel (their table of organization and equipment) has both rotary and fixed wing aircraft. The Wing operates seven MI-17 aircraft of various configurations and is scheduled to receive several C-27 fixed wing aircraft. With limited airframes and the requirement to operate over all of southern Afghanistan, it became imperative to understand what missions they are expected to perform.

The Afghan Air Force and NTM-A already developed the equivalent of a mission essential task list (METL) and it ranged from MEDEVAC to air assault operations.

The Brigade assisted in drafting the battle tasks associated with those METL tasks in order to focus our partnering efforts. Critical to every effort was training their formation in tactics, techniques and procedures that they could sustain on their own.

Multi-echelon Training

Facing an announced drawdown in coalition presence, we viewed the limiting factor as time in the Air



MG Sherzai, commander of the Afghan Air Force Kandahar Air Wing, receives an orientation on the AH-64D by CW2 Kimbrough, 159th CAB.

Wing's ability to increase capacity.

Consequently, and in conjunction with the 738th AEG we embarked on multi-echelon training to take advantage of their capabilities and ours.

With over half of all MEDEVAC operations in Regional Command-South conducted for either Afghan security forces or Afghan civilians, we initially focused on this capability.

In complementary efforts, the advisors helped mentor the Afghan aircrew members in basic flight skills, while the CAB focused on teaching aircrew coordination. Our efforts also included having their pilots and crew chiefs ride along to observe effective crew coordination on our own flights.

For the flight medics, the advisors coordinated and conducted their academic training. We put their flight medics to the test by including them as crewmembers on our MEDEVAC aircraft when responding to Afghan casualties. This program had immediate impacts.

First, the Afghan flight medics gained invaluable practical experience in dealing with trauma.

Second, many patients were calmed by a medic able to speak to them in their own language.

Third, it exercised another link in the system by having the Afghan flight medic transfer the patient to the doctors at the Afghan hospital.

Finally, the medics' ability to successfully treat patients had a strategic communications effect as it showed Afghans helping Afghans.

Simultaneously, the Brigade and advisors worked with the Air Wing to develop a workable system for processing MEDEVAC requests.

Recognizing the potential problems of immediately switching between the coalition 9 line MEDE-VAC request system and an Afghan system, we worked with the Air Wing to incrementally implement and exercise command and control systems that will work for them upon our eventual departure.

In addition to MEDEVAC operations, the Brigade conducts multiechelon training on the Wing's other METL tasks to include: air movement, close air support, reconnaissance and security operations, and of course air assault operations.

As the Afghan National Security Forces take the lead for security, the Afghan Air Force will be a critical enabler. We have an obligation to help them increase both their ability and capacity to handle that mission.

While challenges definitely remain, actively partnering with our Afghan counterparts will make both of our formations better and improve the situation in Afghanistan.



COL Todd Royar is the commander and CW5 Tony Soto is the standardization instructor pilot for the 159th Combat Aviation Brigade currently deployed in support of Operation Enduring Freedom. Ν

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The "Mission Ready" Experience: **Afghanistan**

By LTC Robert F. Howe and MAJ Hise O. Gibson

This article provides the distinct lessons learned by Task Force Ready, 5th Battalion, 158th Aviation Regiment (General Support Aviation Battalion), during our recent deployment. The unit deployed as an independent aviation task force to a region of Afghanistan that had never before seen a sustained U.S. aviation presence, Regional Command-West (RC-West). TF Ready fell under the 82nd Combat Aviation Brigade (82nd CAB) and later the 101st CAB.

Command and Control

In order to set conditions for success, TF Ready phased its forces into theater over a 60-day period. Based on the unique command and control (C2) requirements required to push elements from Germany to the southern hub of Afghanistan and then another push to its final area of operations (AO), TF Ready deployed with a total of four field grade officers.

Our medical evacuation (MEDE-VAC) company commander, who was already setting conditions in RC-West, served as our advanced party (ADVON). This allowed the unit the flexibility to have a decision maker at every critical friction point and geographical area to facilitate success. We utilized our field-grades much like a divisional cavalry squadron prior to the current modularity construct.

The operations officer (S3) was immediately deployed forward to establish a C2 node in RC-West. The S3 worked with Air Force and Navy elements to establish Shindand Airfield and to set the conditions for the unit's arrival. He also conducted essential face-to-face meetings with all Coalition and U.S. units in the AO.

The deputy commander remained at Kandahar Airfield to integrate with the 82nd CAB staff and to properly receive and integrate TF Ready Soldiers and equipment as they arrived in theater. The executive officer focused on aircraft maintenance



requirements to quickly build combat power and to push aircraft to RC-West once called forward by the S3.

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TF Ready had the luxury of an additional field-grade officer, but the lesson learned was that a commander must be very selective on who he/she sends as a lead element into theater.

Due to the difficulty of movement within theater, and the nature of splitbased operations, the element sent forward truly sets the conditions and establishes the key relationships required for the unit's initial success.

Another critical component for the success of TF Ready was the decentralized mission approval process. The 82nd and 101st CAB commanders followed the tactical directives from theater headquarters (HQS) that allowed crews to be responsive in conducting full-spectrum aviation operations. This required the CAB commander to continuously circulate the battlefield and hold discussions, often at the company or crew level, to ensure that every crewmember was clear on the directives.

Ultimately, this enabled task forces to meet the strategic imperative of "protecting the Afghan populace."

The TF Ready commander, due to the displacement of his task force, was given further authority to decentralize his mission approval process to better support the mission.

Once established in two separate regional commands under two separate coalitions HQs (Italian and German), it was critical that his tactical operations center (TOC) personnel were attuned to the activity across half of Afghanistan from the north to the west.

With his primary mission being medical evacuation, the authority to

launch assets had to be entrusted to the team leaders at MEDEVAC sites to facilitate responsive medical care for injured Soldiers.

By empowering his junior leaders, TF Ready was able to provide the responsive patient care necessary to get injured Soldiers to the first line of medical care well within the 60minute Secretary of Defense standard.

Aviation Maintenance

Based on the current nature of deployments, it has become common for aviation units to fall in on an established area to conduct maintenance in support of full spectrum aviation operations in a deployed environment. Units have also become accustomed to providing relief in place with a previous formation. TF Ready did not have any of these luxuries.

The challenges were compounded by the loss of over nine million dollars worth of critical special tools, aviation parts, and equipment as it transitioned from the port of embarkation.

In addition, the magnitude of the loss of essential equipment made the vast accomplishments of the TF Ready aviation maintenance company truly remarkable. In spite of the massive amount of pilfered equipment, the company was able to conduct eight phases, support 40 aircraft, and was required on multiple occasions to perform intermediate-level maintenance.

We learned that commanders must realize that what the unit packs and how one phases equipment into theater are extremely important. Units must plan with the expectation that what they send by sea may not arrive, and what they decide to place on strategic lift may be all they have.

RC-West Establishment

Perhaps the most unique aspect of this deployment was the lack of prior units in Shindand. Because of this, TF Ready did not conduct a conventional relief in place/transfer of authority with another aviation task force upon arrival in RC-West. Instead we directly assisted in building the airfield and developing the RC-West aviation mission support network from the ground up.

Although as an international force we have operated in Afghanistan for a decade, we cannot make assumptions about the maturity of the area being occupied. This lesson was never felt more than during the initial establishment of operations in RC-West. TF Ready required a great deal of equipment to operate that was not on our MTOE.

For example, to properly control aviation operations across a broad battle space we required additional communications equipment, specifically a Joint Network Node (JNN) with the associated operators which is normally allocated only to brigade headquarters and higher. The tentage that had long since fallen off of our unit equipment list was also needed to establish basic operational functions.

There were a multitude of challenges

immediately apparent upon arrival in RC-West with respect to our interaction with the Coalition and ISAF command. RC-West incorporated a large battle space consisting mostly of moderate threat areas lying in relatively lower elevation terrain when compared with the eastern regions of the country.

The RC-West ISAF command was headquartered in Herat, approximately 25 minutes by helicopter flight, north of Shindand, while TF Ready's higher HQ (82nd, and later 101st, CAB) was headquartered in Kandahar (RC-South), over 200 nautical miles away.

The missions and intent of these two higher HQs were constantly competing with one another, leaving TF Ready, in many ways, autonomous to prioritize needs based on ground force requests. We found that, in order for the proper support to occur, it was critical that the aviation assets in the region be controlled by the regional command in which they are physically located.

Once TF Ready arrived in entirety in RC-West, it transitioned to full operating capability (FOC). This progression took several months due in large part to logistical hurdles that often required non-traditional and innovative solutions as well as patience to endure protracted delays.

TF Ready also effectively established and implemented an air mission request system that did not previously exist, and thereby set a pace for steady state operations.

Conclusion

The lesson to take from TF Ready is that the 60-day timeline is not the preferred method to deploy, but is possible with a higher HQ not only pushing, but also pulling. The TF Ready team took nothing for granted and assumed the conditions would be analogous to Operation Iraqi Freedom 1. This in itself set the proper tone.

Finally, we learned that all equipment crucial to performing the mission must be sent by air.

LTC Robert F. Howe is the commander and MAJ Hise O. Gibson was the operations officer and currently the executive officer of 5th Battalion (GSAB), 158th Aviation Regiment, 12th Combat Aviation Brigade. Both have recently returned from supporting Operation Enduring Freedom in Regional Command-West, Afghanistan and are currently assigned to Katterbach Army Airfield in Ansbach, Germany.



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By Mr. Edwin J. Mickley

ore than 600 attendees ventured into the American Bank Center here Oct. 26 and 27, gathering insight on how Corpus Christi Army Depot reduced cost, increased production, and maintained high quality while meeting Warfighter needs successfully during the past year and what the depot is planning for the year ahead.

Industry and military leaders across the Army aviation enterprise participated in panel discussions that centered on aviation maintenance, critical partnerships and future combat aviation brigade readiness during the 9th Annual Luther G. Jones Aviation Forum.

Keynote speaker, MG James E. Rogers, commanding general of the U.S. Army Aviation and Missile Life Cycle Management Command (AMCOM), remarked how important CCAD was to the fight, the "the artisans are executing and leading the change to develop the way ahead for



Mr. John Lewis, team leader in the Black Hawk Assembly Branch, is awarded the Donald F. Luce Depot Maintenance Artisan of the Year Award by Luce's daughter, Gail Davis during the Luther G. Jones Professional Aviation Forum. Looking on is LTG (Retired) Daniel J. Petrosky, president of the Army Aviation Association of America, and COL Christopher B. Carlile, CCAD commander.

all of us to follow."

He said aviation's mission is critical to our success in Afghanistan and CCAD efforts support the enterprise today and well into the future, "we're taking our lead from Corpus Christi." "Chris [COL Christopher Carlile, CCAD commander] understands the business; Corpus Christi is leading the effort on lowering the cost of aviation." he said.

This year's theme, "50 Years of Support to the Warfighter," captured



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ever-changing technological demands of the modern military world. By helping the soldiers of **TODAY**, you're helping the America of **TOMORROW**.



Corpus Christi Army Depot's historical importance and how it's leaning forward-implementing a strategic plan that drove down cost through a costconscious culture while providing world-class support to the Warfighter.

"It's about being the preferred best solution for the Warfighter. In essence we're focused on cost-consciousness as a team effort to improve the entire aviation enterprise," said Carlile.

"We also focus on efficiency- to be effective at producing more at a lower cost, to give us more capability."

He said. "Our strategic plan is to do everything possible to make CCAD a world class, high tech, modern facility with the best workers in the world."

The strategic plan's success is exemplified in the workforce by individuals like Mr. John Lewis, the Donald F. Luce Depot Maintenance Artisan of the Year Award winner.

Lewis, as a team leader in the Black Hawk Assembly Branch of the Directorate of Aircraft Production, played a critical leadership role in the depot producing an unprecedented 48 UH-60 Black Hawks that returned to the fight this year.

LTC Don Luce's daughters, Robin and Gail, presented the award to Lewis.

Mr. Ed Mickley is the public affairs officer for Corpus Christi Army Depot, Corpus Christi, TX.

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Ask The Flight Surgeon



Decompression Sickness and the Army Aviator

By Dr. (LTC) Joseph Puskar

Q: Doc, I went scuba diving yesterday and I'm having some elbow pain that feels like a nagging toothache, and gets worse when I move it. I followed the dive tables, but I might have stayed down longer than I should have. What do you think it is?

FS: It seems that you're most likely suffering from a case of Type I decompression sickness (DCS), or more commonly the "bends." Type I DCS affects the joints where nitrogen bubbles large enough to cause pain and inflammation have formed.

It is called the bends because early bridge workers who went underwater for long shifts in caissons, or large bells with surface-supplied air, would often be bent over due to the joint pain associated with the condition.

Type I DCS can manifest only with skin symptoms. Sensations such as itching, mild stinging or pin pricks, hot or cold sensations and numbness and tingling may be the initial signs of a Type I cutaneous decompression sickness. A more serious form of type I skin DCS is a rash called cutis marmorata that is a raised, marbled, itchy rash, and requires chamber treatment because it can block off small blood vessels in the skin.

Type I DCS can also involve the lymphatic system with pain and swelling. In this case I'd try to get you to a recompression chamber, and run a U.S. Navy Treatment Table 6 for you.

We would treat you with periods of 100 percent oxygen at pressures up to 60 feet of sea water to provide a steep gradient for the nitrogen to diffuse out of your body, and the high pressure will also shrink or "crush the bubbles."

If a chamber were not available we would give you 100 percent oxygen for several hours by a non-rebreather mask again to increase the diffusion gradient and wash that nitrogen out of your body. More serious types of DCS include Type II that affects the central or peripheral nervous system, inner ear vestibular system, or the cardiopulmonary system.

Neurologic type II DCS can cause a wide spectrum of symptoms from headache, nausea, vomiting, vertigo, dizziness, confusion, memory loss, and visual disturbances all the way through blindness, weakness of the extremities, unsteady gait, seizures, paralysis, coma, and death.

Spinal cord hits result in abnormal sensations such as burning, stinging, and tingling around the lower chest and back.

Symptoms may spread from the feet up, and may be accompanied by ascending weakness or paralysis.

Girdling or circumferential abdominal or chest pain can be present if the spinal cord is affected.

DCS affecting the lungs is commonly called the "chokes." With the chokes there is burning deep chest pain under the sternum, the pain is aggravated by breathing, and this causes shortness of breath, and a dry, constant cough.

Severe cases may have gas bubbles in the mediastinum (the area around the heart between the lungs), and may be evidenced by nitrogen bubbles under the skin of the neck around the throat area that crackle when pressed on.

Be aware that any of the above types of decompression illness may affect high altitude aviators, and particularly if an aircraft depressurization event occurs.

Altitudes of 25,000 feet and higher are where most altitude DCS events tend to occur, yet the lowest recorded case of altitude DCS was 18,000 feet MSL in a healthy individual. This is well within the realm of Army aviation.

Mitigation efforts should be directed at reducing time at altitude, lowering the rate of ascent as much as is practical, avoiding scuba diving for at least 24 hours before flying, breathing oxygen above 10,000 feet altitude for sustained operations, and rapidly descending to a safe altitude should a

cabin depressurization event occur. There have been many well documented, and some severe cases of DCS in aviators of our sister services in high performance, high altitude, and pressurized aircraft.

Any of the more serious types of DCS require rapid treatment in a chamber to prevent permanent injury or death of the aviator.

Our Army aeromedical policy letter for decompression sickness gives a 72 hour grounding period after the symptoms are completely resolved.

AR 40-8 states that "Decompression sickness, resulting from diving or other hyperbaric exposure, requires a restriction from flying duties by a flight surgeon or APA."

The U.S. Air Force guidelines are 72 hours for fully resolved Type I DCS. U.S. Navy instructions for a single episode of Type I DCS (joint pain only) are: ground 3 to 7 days and return to duty if no residual deficits upon examination.

Safe flying and see you at the flight line! Doc Puskar

References: AR 40-8, 6.g., h. Exogenous Factors/U.S. Army Aeromedical Policy Letters, Neurology, Decompression Sickness, pg. 3/Fundamentals of Aerospace Medicine, DeHart, 4th Edition pg. 73

Question for the Flight Surgeon?

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

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

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

AAAA Chapter Affairs



Reward Your Performers

By COL (Ret.) Robert D. Carter

The Army Aviation Association of America (AAAA) is an organization that relies on its members' support for sustainment of its programs. It is important to recognize our members for the hard work that they perform in supporting the Aviation Soldier and family.

AAAA has an extensive awards program that reaches all facets of the organization. This column will give you a summary of the awards that Chapters are able to utilize as part of their individual programs.

National Awards Plus

Everyone is most familiar with the AAAA National and Functional awards that tend to be the most advertised

recognition. These awards are clearly described on the AAAA website (*www. quad-a.org*) or in the AAAA InfoFile.

As an avenue to get to the National awards, chapters may set up their own awards process to nominate the best from their chapter towards National submissions. Winners at the chapter level can be recognized by AAAA Certificates of Outstanding Achievement. Chapters may also use the Certificate of Appreciation or Commendation to recognize contributions to the organization.

The Aviation Soldier of the Month program is one that is very beneficial to our Soldiers. Besides a Certificate of Outstanding Achievement, the Soldier will receive a complimentary one-year membership in the Association and the award recognized in Army Aviation Magazine.

For those chapters associated with the Aviation institutional training base, Distinguished Graduate Awards may be used. A complete listing of the courses covered under this award and the associated award is available in the AAAA InfoFile.

Membership Awards

We have a lot of members that are out spreading the word about the benefits and signing up new members every day. The "Top Guns" for the Association are recognized each year during our National Annual Forum for the most members recruited into AAAA. In addition to a Certificate of Outstanding Achievement, the top recruiters also receive an expense paid trip to the Convention and a monetary award.

Aviation-Branched Officer Candidate School (OCS) Graduates are presented a set of Aviation Officer Branch Insignia upon completion of *Continued on page 67*



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ARMY AVIATION

AAAA Membership Memo



What Does It Mean to be a Quad-A Member?

By CW5 Mark W. Grapin

While it would be easy to our membership dues check? While it would be easy to rattle-off some bullet points, the value in the question is likely better found in individual pondering of your membership investment. Better, how does this membership fit into your career, the larger business strategy of your corporation, or the consideration of what Army Aviation would look like if we didn't have a professional association?

I can't pass up the opportunity of this forum to prime the pump, though, so let me offer:

1. I matter, and my service matters – how comforting it is to know that my good work in Army Aviation is worthy of recognition at the appropriate level;

2. My Aviation brethren matter and my professional association is a means by which we stay in contact, or renew contact after untold years have passed;

3. My lessons learned won't be lost to history and there is a forum available to broadcast, or recall, these lessons;

4. The boss hears me, and here boss is a relative term – whether it's the mission-mandator with all the stars on their collar, the industry partner building my winged wonder, or the purse string holder who decides which funds are pushed to which organizations;

5. Perhaps most important among this list, and tallied in the spot to be most remembered: my family.

Consider this the toss of the ball to each reader – each member – to ask the question aloud what your membership means to you, and the larger question of what it means to be a Quad-A member.

Refusing to Discard Our Legacy

In a point I discussed above, we hit upon a fundamental tenant of our Association, in preserving our deep and rich legacy. With more than a decade of the calendar behind us in what has become the norm of war, it is becoming more common for many of us to think of the "old" days as those before fielding of the Block III Apache, or before we RL-progressed in the UH-72. My personal affiliation with our professional association is deeply rooted in its commitment to remember every rung on the ladder from Eddie Ward to both Mike Novosels, and from the Cub Club to Mike Durant.

These are the shoulders of the giants for whom the desert sands of Iraq or the mountain plains of Afghanistan are not included in their memoirs – yet we must be wary of the risks in discarding entire photo albums in trying to make fresh room on the shelves for more recent accomplishments.

There is a balance to be struck in celebrating our newest heroes, and welcoming them to the ranks of those Army Aviation veterans who are yet due recognition; and how we will effectively preserve the accomplishments of each.



Members of the Delaware Army National Guard Aviation community – some currently serving, and some alumni – join with the entire Delaware Congressional Delegation in a ribbon cutting of the newlyrenovated Army Aviation Support Facility in New Castle, DE, to celebrate the 61st anniversary of Army Aviation in the state.

The old axiom bears true here: Those who do not study history are doomed to repeat it. We must understand what made shortcomings in the UH-1C successes in the AH-1G; what made the MK-40 a lopey rocket that truly required technique and Kentucky windage, and how our program and product developers leveraged these lessons in bringing the magic of the MK-66 rocket to a 19-shot pod near you.

The Delaware Army National Guard gets this concept, and on Sept. 1 celebrated its 61st year of Army Aviation at their newly-completed Army Aviation Support Facility in New Castle. It is this brick and mortar and its relationship to the Aviation Soldiers that pass through each threshold that has more than earned our attention.

As the contractor turned over the keys to the newly-renovated hangar in New Castle, no small percentage of the cast that had assembled required some ambulatory assistance or were tugging their own oxygen bottles.

Each of these seasoned warriors and senior witnesses had worn the silver wings, and understood their lifelong charge to stay involved, to be mentors, and to ensure their hardearned lessons didn't become lost to the pages of history, and required learning anew. And whether it's a trip through the Army Aviation Hall of Fame in Alabama, or the local postflight watering hole, let's hop on board the hangar-flying that's sure to be taking place – and the first of many legs on the journey of preserving our aviation heritage and legacy.

Continued Progress in Other Membership Initiatives

If you're deployed to the combat theater, remember to send us word to renew your membership at no cost for the year.

Details on each of the membership programs are further described in the AAAA InfoFile, and I welcome your questions at *mark.grapin@quad-a.org*.

CW5 Mark W. Grapin AAAA Vice President for Membership

Joseph P. Cribbins Aviation Product Forum

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Objective Scope - "Enabling the Future While Performing Today"

The Army Aviation Association of America (AAAA) will sponsor the 38th Annual Joseph P. Cribbins Aviation Product Forum for interested members of industry and the aviation logistics and acquisition communities on February 8-9, 2012. The theme of this year's symposium is "Enabling the Future While Performing Today." The purpose of the Aviation Product Forum is to stimulate dialogue among industry executives, senior government officials and military leaders concerning the many challenges in support of Army aviation's war-fighters. The Forum will consist of individual and panel presentations with follow-on question and answer sessions. This year, the focus will be on the challenge of sustaining operations, maintaining, resetting, and modernizing equipment in a declining budget environment. We will discuss various bridging strategies for modernizing aging aviation equipment and sustaining the industrial base.

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 Forum 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 Forum 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.

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ARMY AVIATION

AAAA Spouses' Corner

Observations from the 2011 AUSA Annual Meeting and Exposition By Judy Konitzer

attended the 2011 Association of the United States Army Annual Meeting and Exposition held October 10-12 in Washington D.C. As always it was a great mix of opportunities to see old friends, visit hundreds of booths observing all the latest technology, and attend the Family Forums orchestrated by Sylvia Kidd and her Family Programs staff.

So much information is shared by our military leadership and a myriad of other professionals over the course of three days that I won't be able to relay it all; however, I would like to mention a few things.

Mrs. Kidd opened the Family Forums with the observation that there were fewer in attendance this year because of recent funding cuts affecting Family Readiness Group travel and training sessions. which is unfortunate because "these are the very people who have so ably assisted commanders during the long string of deployments," she said.

She noted that Chairman of the Joint Chiefs of Staff Admiral Mike Mullen in his retirement speech urged that funding for family programs remain the same. It remains to be seen if this will happen.

She conveyed that while there are now fewer and shorter deployments, there will probably be an increase in turmoil and the stress will remain.

Many problems that were shelved because families did not want to "rock the boat" when Soldiers reintegrated for short periods will be resurfaced. Feelings of resentment and harbored emotions are things to prepare for.

The Secretary of the Army Speaks

Kidd's introductory remarks were followed by those of Secretary of the Army John M. McHugh, who acknowledged how important it was to have a means to dialogue at this event and to have the ability to learn about the challenges facing military families.

He stated that budget cuts will be a problem for the future and resourcing



Back Pack Journalist teachers and youth met daily in the Ops Room "Covering the Assignment" at the AUSA annual meeting, October 8-12 at the Washington D.C. Convention Center. The youth worked in teams on the photojournalism project covering the A-Z's of elements of the meeting and exposition. They edited and assembled their experiences for posting on their website, blogs, Twitter, Facebook and AUSA's website.

will be a challenge. However, "I want to make a commitment to you," McHugh said, "to let you know that while we're going to look at ways in which we can do things more efficiently, we owe that to ourselves, we owe it to the taxpayers of this nation; we will try and make decisions as to how you feel what is working and what is not.

We have put over \$12 billion into family programs, and we've got to make sure that we're not funding something with a lot of money that you folks either don't know about, are confused about, or don't take advantage of. We may change some things. I'd like to think those changes will be for the better. But we will not make Army family programs the bill payer for other kinds of initiatives."

The US Army Chief of Staff Makes a Commitment

GEN Raymond Odierno, U.S. Army Chief of Staff, followed with we have been an Army at war since 9-11 and not only our Soldiers, privates to generals, but also their families have carried the burden. It did not matter where Soldiers were deployed, because families back home were struggling too.

He himself has been deployed for 5 out of the past 8 years and he thanked his wife Linda, who has worked tirelessly from every level for the past 35 years of their marriage for her continued support. He acknowledged she gives him feedback, not only as an Army wife, but as an Army mother.

Odierno expressed concern about what this war is doing to our children because "...they are the strength of our nation – our children are the strength of our Army – and how we help them to get through these numerous deployments and how we help them to cope with issues of missing dad or mom is important."

He went on to say that ensuring we have invested in programs that address the diversity of our families not only for today but for the future and providing families with appropriate training and assistance to become resilient would continue to build confidence and trust and allow families to remain strong together.

He reinforced Secretary McHugh's

position that "we will not abandon family programs, but we are operating with a lack of a Defense Appropriations bill so we have to be realistic and figure out which programs are the best," and if there is "no bang for the buck, eliminate it!"

There are also many not for profit agencies that provide worthwhile services for our Soldiers and their families, but Odierno admitted there are legal restrictions about releasing information to these agencies, thus insuring privacy to individuals.

He will continue to work this issue thru Congress as it would help to have a program that could fill the gaps in what the Government offers and what the not for profits can legally offer.

He said, "We are heavily dependent on what you feel works and what doesn't. We want to make wise decisions;" and he asked for feedback at the installation level as well as from the Guard and Reserves. He asked folks not to panic but acknowledged that "we have to make choices. Your voice carries more weight than a staff officer coming to me!"

Commanders and installation commanders will have a process to get him this feedback and it is also important for everyone to contact their congressional representatives about their concerns and the need to keep funding adequate for family programs.

In another forum, Odierno and other panelists addressed "America's Families: Honoring Our Survivors" which I will cover in a future article.

BackPack Journalists Cover the Convention

Twenty military youth (8 National Guard, 2 U.S. Army Reserve, and 10 from Forts Bragg and Campbell) who had participated in 2-day journalism workshops across the country acted as public affairs reporters during the meeting. They interviewed leadership, shared stories on the legacy of the U.S. Army, covered the forums and provided their own perspective along with Linda Dennis, Director of the BackPack Journalist program.

Dennis said "they all lined up in front of a room filled with about 700 people and each were open and honest, spoke directly to the audience about their experiences, some very personal, and then quietly sat down on the stage. Following the close of the session, many people rushed up to thank them and they became rock stars for a few moments."

Backpack Journalist workshops teach youth ages 12-18 basic writing, reporting, broadcasting, and photojournalism skills, and provide them the opportunity to work through their emotions with other youth who are experiencing the same issues by journaling about their feelings and reactions.

It also has a national intern program consisting of military youth who have taken the course, graduated and wish to assist their teachers in a continued learning environment.

I spoke with Quincy Winder, a Youth Challenge Academy Graduate from Ft. Gordon, Georgia, who was very enthusiastic about his experience at the convention and the opportunities presented to him thru the program.

"I won this trip to AUSA as a result of writing an essay during a workshop this past July. I was told that AUSA would be an amazing experience and it was.

What fascinated me were all the "classified" and "no picture" areas, yet on display I would see models of the drones and large vehicles. I got to test drive in a simulator at Raytheon and I wore a prototype helmet that allowed me to see all around. It was high tech! I spent time with LTG Mark

Reward Your Performers Continued from page 63

OCS. The National Executive Board approves this award and it is presented by the Aviation Branch leadership.

Honorable Orders of St. Michael and Our Lady of Loreto

The Order of Saint Michael is widely used to recognize significant contributions to Army Aviation by individuals. It can, along with the Order of Our Lady of Loreto and the Knight of the Order of Saint Michael, cover a broad range of eligible supporters of Army Aviation. Procedures are contained under the Awards tab of the AAAA website.

Bronze awards are approved by the local Chapter President. Silver and Gold awards are boarded and approved at the National level.

Chapter Officer Recognition

The last category of recognition that I want to highlight is the Past Officer pins. These recognize Chapter officers whom the Chapter President feels have enhanced the activities of the Chapter Hertling, the commanding general of U.S. Army Europe, and learned a lot about the countries in Europe."

Quincy continued, "I met the people behind the scenes, and learned all about how they are using avatars to teach leadership, plus how they tweet and keep all informed via the internet."

He also learned that the Exposition was not just about two huge halls filled with the latest and greatest military supply companies and military family support agencies, but that AUSA worked to support Soldiers and their family's needs at the congressional level. He learned how "lobbying" is used to support our military.

This program is strongly supported by the National Guard and Army Reserve thru Yellow Ribbon programs and camps. Workshops can be requested by any command or Family Readiness Group. There is no fee for the participating youth.

For more information, contact Linda Dennis at (404)314-8007 or go to *www.abackpackjournalist.com*.

- * * -

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

and AAAA. The request form is contained within the AAAA InfoFile.

The AAAA National President also recognizes performance of Chapter Presidents that are stepping down with a Past Presidents pin. These pins are obtained through the National Office.

As your VP for Chapter Affairs, I will use this column to highlight procedures that assist you in meeting your individual Chapters' goals. Feel free to contact me if I can help your Chapter or obtain clarification of National procedures.

If you have an idea of a subject that needs to be transmitted across our 69 Chapters, let me know and I will use this column as the voice across the Association. As a reminder, my email address is *bob.carter@quad-a.org* – drop me a line!

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

> COL (Ret.) Bob Carter AAAA VP for Chapter Affairs





Aviation Pioneers: Aviation Medicine

LT. COL. Rollie M. Harrison Army Aviation's First Flight Surgeon By Dr. Jim Williams

t the time of his death on March 2, 1976, Dr. Rollie M. Harrison, a retired Army Reserve lieutenant colonel, was an examining physician at the Armed Forces Entrance Examining Station at Fort Worth, Texas. His death ended a career that, with several twists and turns, let Harrison claim the title as Army aviation's first flight surgeon.

Born in Ramon, S.D., on Oct. 22, 1900, Harrison received his medical degree from Northwestern University in 1934. After establishing a private practice in a Chicago suburb he entered the Army Reserve, being commissioned a first lieutenant on Jan. 21, 1936.

On July 23, 1937, he entered active duty as a general medical officer at Fort Sheridan, Ill., and later went to a similar assignment at Fort Custer, Mich. Following America's entry into World War II Harrison was sent overseas to an Army Air Corps assignment in the Southwest Pacific Area. In 1943 he returned to Randolph Field, Texas, to take the Basic Aviation Medicine Course. After studying tropical medicine at Walter Reed Army Medical Center in Washington, D.C., he returned to the Pacific as a flight surgeon. He remained in the Pacific until May 1947, when he returned to private practice in Illinois.

Harrison retained a reserve commission, and when the rest of the Army's flight surgeons transferred to the newly-created U.S. Air Force in September 1947, he alone remained with the Army. The loss of all but one person with a background in aviation medicine left the Army overwhelmingly dependent on the Air Force to support its medical needs. By the time the Korean War broke out in June 1950, the growing importance of aviation to the Army was already evident.

The number of aircraft in a division had grown from 10 to 18 since World War II, and in November 1950 the first Army helicopter company activated at Fort Sill, Okla. To meet the increased needs, the Army immediately began to expand flight training there. In conjunction with this expansion, Harrison returned to extended active duty. After a refresher course at the Air Force School of Aviation Medicine, Harrison became the sole flight surgeon at the Fort Sill dispensary. He continued in that role until the school moved to then-Camp Rucker in 1954.

Harrison became something of a legend for his zeal in promoting aviation medicine. He believed that a real flight surgeon had to be more than a doctor, he had to be a friend to the pilots. He enjoyed joking with the younger pilots, but they feared him when he flew with them on their final check rides. He was quick to act when someone was in danger and equally quick to correct the cause of danger as soon as it was past.

Harrison made it a point to know not only the pilots but also their families and what was happening with them. He was highly direct and personal in his approach to ensuring physical fitness, and was particularly strong in stressing the need for physical fitness in aviators over the age of 30.

Harrison taught in the Department of Air Training at Fort Sill, which became the Aviation School on Jan 1, 1953. He formed the foundation for training in aviation medicine within the Army and developed the first Army aviation orientation course for Army medical officers graduating from the Air Force school of aviation medicine.

When the Aviation School moved from Fort Sill to Fort Rucker, Harrison went to Germany to command the 31st Surgical Hospital and serve briefly at the 97th General Hosp. From 1958 to 1960 he was the chief of the Medical Examination and Aviation Medicine Division, as well as the Aviation Medicine Advisor, at Fort Rucker. During this last tour, Harrison worked to prove the value of having flight sur-



geons participate in investigations of aircraft accidents and helped develop the techniques for such participation.

Harrison was a character and perhaps cultivated the image of an eccentric. It was ironic, though not necessarily surprising, that this vocal opponent of smoking among aviators died of respiratory conditions probably related to his own use of tobacco. His dedication to duty, however, was unquestioned. He was renowned for working seven days a week. While at Fort Sill, Harrison lived in quarters just a block from the dispensary and frequently interrupted or set aside hunting, fishing or golf to meet and treat sick aviators.

When the time came for Harrison to depart his duties at Fort Rucker, some who were present at the time recall that it was clearly a difficult transition. Harrison relished the close, personal ownership of his role and the service he gave.

Harrison's legacy lives on in Army aviation and particularly at Fort Rucker. Flight surgeons everywhere – and the Army School of Aviation Medicine at Fort Rucker that trains them – are essential elements in the welfare, safety and combat effectiveness of Army aviators. The School of Aviation Medicine has for many years been the home of Harrison's personal effects, including his original flight wings and photo albums.

Today, more than 20 years after Harrison died, these personal items, a street name and the name of a clinic remain tribute to a man who, in quiet but important ways, helped Army aviation become the force that dominates the battlefield and that promises to remain "Above the Best."

Dr. Jim Williams was the Aviation Branch historian at Fort Rucker, AL, at the time this article was published.

ARMY AVIATION



And Announcements Related to Army Aviation Matters

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

Sikorsky Partnership Helps CCAD Reach 48th Black Hawk



U.S. ARMY PHULU BY EU MICKLEY

Black Hawk production reached unprecedented levels this year at the Corpus Christi Army Depot due to an integral partnership with Sikorsky Aircraft Corporation. Two years ago, the depot rolled out its initial A- L Recapitalized (Recap) Black Hawk conversion, last year CCAD produced 38 and this year the depot completed 48 Black Hawks that are now back in the fight. The initial contract between Sikorsky and CCAD was signed in December 2002; following the success of the first contract, AMCOM, CCAD, and Sikorsky renewed the partnership in 2008.

As a result of CCAD's partnership with Sikorsky, the depot is currently able to maintain a 93% fill rate on aircraft requirements. Sikorsky has engineering, field service representatives and material analysts on site working side by side with CCAD artisans to resolve issues as they arise under Sikorsky's Technical Engineering Logistical Support Services (TELSS) program. Through the Recap program the aircraft come in as A-model aircraft and leave after about 350 days at the depot, totally rebuilt, converted back into L-Models with more capability and power, and better flying. During CCAD's partnership with Sikorsky, the depot has tripled component production from 3,600 to 15,000; reduced repair turnaround time by 58% and reduced material costs by more than \$10,000,000.

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

Battelle Memorial Institute, Columbus, OH, was awarded a \$14,395,550 firm-fixed-price contract to provide for the procurement of UH-60 fault-function panels. Work will be performed in Columbus, OH, with an estimated completion date of Sept. 30, 2016.

Logistics Services International, Inc., Jacksonville, FL, was awarded an \$11,203,191 firm-fixed-price contract to provide for the design, develop, integrate, test, delivery, and installation services for two Blackhawk maintenance trainers for the UH-60M in support of the U.S. Army Aviation Logistics School. Work will be performed in Jacksonville, FL, with an estimated completion date of March 9, 2014.

Evergreen Helicopters of Alaska, Inc., Anchorage, AK, was awarded a \$6,932,931 contract to provide for air transportation services throughout Afghanistan in support of the U.S. Army Corps of

Engineers. Work will be performed in Afghanistan, with an estimated completion date of Sept. 25, 2012.

Sikorsky Aircraft Corp., Stratford, CT, was awarded a \$38,268,248 firm-fixed-price contract to provide for the modification of an existing contract to procure 14 aircraft for the United Arab Emirates. Work will be performed in Stratford, CT, with an estimated completion date of Dec. 31, 2012.

Sikorsky Aircraft Corp., Stratford, CT, was awarded a \$12,500,000 firm-fixed-price contract to provide for the procurement of spares and ground support equipment provisions in support of the 15 UH-60M helicopters for the Swedish Armed Forces. Work will be performed in Stratford, CT, with an estimated completion date of Oct. 31, 2012.

General Atomics Aeronautical Systems, Inc., Poway, CA, was awarded a \$30,279,377 cost-plus-fixed-fee contract to provide for the modification of an existing contract for additional engineering services for the MQ-1C Gray Eagle Unmanned Aircraft System program. Work will be performed in Poway, CA, with an estimated completion date of Aug. 30, 2012.

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ARMY AVIATION

NOVEMBER 30, 2011

PEOPLE ON THE MOVE

Aviation General Officer Assignments



Secretary of Defense Leon E. Panetta announced on Oct. 13 the appointment of MG Glenn K. Rieth, adjutant general of New Jersey, and nine other new members to the Reserve Forces Policy Board (RFPB). First established in 1951, the RFPB serves as an independent adviser to provide advice and recommendations directly to the secretary of defense on strategies, policies, and practices designed to improve and enhance the capabilities, efficiency, and effectiveness of the reserve components. The board was restructured by the National Defense Authorization Act of 2011 with a revised membership and operating framework.



The Chief of Staff, Army announced on Oct. 28 the assignment of BG Robin L. Mealer, Deputy Director, J-5, United States Forces-Iraq, OPERATION NEW DAWN, Iraq to Director, United States Army Manpower Analysis Agency, Fort Belvoir, VA.

Charter Activation





On Oct. 28th, in a cere-Redstone mony at Arsenal, AL, COL Brian R. Tachias accepted the responsibility as the first

director of the newly activated Army Fixed Wing Project Office from MG William T. Crosby, the Army's program executive officer for aviation. The office, which is located in Huntsville, AL, will have the overarching responsibility for all fixedwing related acquisition support to include the Fixed Wing Product Management Office.



Transfer of Authority

South Carolina Army National Guard LTC Jakie Ray Davis, CSM Lonnie M. Griffin, and PFC Corey M. Branham, of the 1st Battalion, 151st Aviation Regiment, Columbia, SC, unroll their battalion colors during the transfer of authority ceremony, Sept. 29, 2011 at the Quick Reaction

Flight School Graduates

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

51 Officers, October 6 IERW AH-64D Track LT Lambert O. Guirao *DG WO1 Jason A. Wyllie * DG WO1 Jason E. Manthey *HG LT Samual D. Stedman *HG WO1 Bryan K. Bradway WO1 Ryan D. Caramanica * LT Christopher M. DeMeis LT Aaron M. Hooper WO1 Robert A. Ibrahim LT Jacob D. Ingebritson ¹ WO1 Bridger A. Kimber LT Craig A. Maddy * LT Cameron B. Martin * WO1 Daniel A. Moross * WO1 Chad A. Risberg WO1 Wyatt W. Saint * LT Mike W. Schreckenbach WO1 Jordan H. Simmons LT Douglas G. Wolfe II

UAS Operator Graduates

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

Shadow UAS Operator Course-Class: 11-525/526 30 Graduates, Oct. 20, 2011 PFC Philip D. Oliver HG HG SPC Messanh K. Adjangba PV2 Kameron Alexander PV2 Robert M. Armstrong

IERW CH-47D Track WO1 Brian G. Francis DG WO1 Vania Apodaca WO1 Michael A. Szalma IERW UH-60 Track WO1 Michael R. Ferioli DG LT Brandon B. Jones DG Lt Christopher Arndt HG WO1 John P. Geraci HG LT John D. Howard * HG WO1 Keith J. Blasi WO1 Joshua D. Ciszczon LT Alexander DeRosa LT Erica Devers LT Phillip Draper WO1 Tyler Ehnes WO1 Brandon Gardner WO1 Joshua Ison LT Thomas McHale * LT Dana Parker LT Daniel J. Petrella LT Kimber L. Pruitt LT Chase Smith LT Cody Sommer * WO1 Joshua C. Ward * LT Michael Zhou IERW UH-60M Track WO1 Sean A. Moody HG WO1 Michael J. Dykman WO1 Alessandro K.

LT Katrina A. Kamel * LT Daniel P. Quinn * WO1 Jason L. Ragland LT Taj L. Williams

SPC Matthew E. Larue

PVT Jordan B. McLaurin

Janitschek *

SGT Michael S. Bradburn PV2 Frederick N. Cole PFC Charles R. Dills PFC Gregory L. Gallegos PFC Andrew M. Garcia PV2 Gustavo Garcia PFC William L. Garner PFC Nicholas A. Garrett PFC Dustin T. Giles PFC Dylan J. Judge PV2 Douglas Krieger PFC Daine W. Kvasager

SGT Theodore C. Meija PV2 Brandon E. Murphy PFC Paul M. Murray PFC Logan T. Reumont PFC Brandon L. Rhyne SPC Elias E. Soto PFC Nicole D. Spawn PFC Cameron M. Stanfill PV2 Jeffery T. Stowe PFC Walter C. Wartman

Warrior (A) UAS Operator Course - Class 11-004 11 Graduates, Oct.18, 2011

Capability 1/Replacement 2 (QRC 1-R2) Gray Eagle hangar at Camp Taji, Iraq. The 1-151st ARB replaced the 8th Bn., 229th Aviation Regiment.

Flight School Graduations



MG Anthony G. Crutchfield, U.S. Army Aviation Center of Excellence and Fort Rucker commanding general, speaks to recent Initial Entry Rotary Wing Program students at the U.S. Army Aviation Museum during a graduation ceremony Aug. 25. He said it was not part of his usual duties, but he didn't want to miss this opportunity to talk to the new Aviators about what could be ahead for them.

LT Scott C. Allinder LT John W. Barnes * LT Daniel W. Berkowitz WO1 Tyler O. Wright 55 Officers, October 18 IERW AH-64D Track LT Adam De Santis WO1 Bradley Waggoner DG LT Marisa C. Yarmie + DG LT Michael J. Ernest LT Mitchell Geibel LT Timothy A. Davis **HG** WO1 Robert Weaver **HG** LT Andrew J. Gill LT Jonathan E. Jordan WO1 Arthur W. Orr * LT Matthew L. Blair LT Jared R. Dunham LT John B. Pride LT Travis J. Gage * WO1 Bryan K. Haldeman LT Gabrielle K. Quatse * WO1 Russell P. Reinemer WO1 John D. Hatten WO1 Travis L. Rollins LT Michael B. Hill LT Jedidiah R. Stewart WO1 James Y. Kim LT Nathan P. Taylor LT Blaine M. Williams WO1 Robert D. Patrick CW2 Adam T Reese LT Christopher A. Reichert IERW UH-60M Track LT Jason D. Robinson WO1 Christopher R. WO1 Jeramie Simpson WO1 Benjamin K. Wilcox Jeurissen DG LT Arthur J. Murphy HG

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IERW OH-58D/R Track LT Joseph L. Barbani LT Alex Reiter **DG** WO1 Jeremy Rodriguez **DG** WO1 Larry C. Coleman Jr. WO1 Shannon Bohlman WO1 Jerry R. Bosworth WO1 Michael R. Garcia LT Gregory Griffith * LT Marc D. Savioli WO1 Christopher R. Hitt CPT Eddie D. Walker WO1 Samuel J. Watte WO1 Brian T. Wojdak WO1 Jacob Jadoobirsingh WO1 Matthew S. Jaggers * WO1 Thomas K. Olinger * DG = Distinguished

IERW UH-60 Track LT Sean J. Eskew DG LT Matthew P. Leitch HG WO1 Scott D. Peterson HG LT Daniel Richardson HG

PFC Jacob Crist PFC Jerry Bancroft PV2 Hieronymus Corvus PFC Patrick Dennis SPC Tyler Francis PFC Jeremy Holt PFC Cameron Ouellette SPC David Palma SPC Shane Rawlings PFC Matthew Rindall PFC James Roth SPC Jeffrey Stewart

Graduate

HG = Honor Graduate * = AAAA Member

HG

+ = Life Member

HG = Honor Graduate

ARMY AVIATION

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<< AAAA News

Supporting the U.S. Army Aviation Soldier and Family

ORDER OF ST. MICHAEL and OUR LADY OF LORETO Awards

Colonial Virginia Chapter



SFC Charles E. Gossett, Co. D, 1st Bn. 229th Avn. Regt. Armament Platoon Sergeant, was inducted into the Honorable Order of St. Michael, Bronze by his regimental commander, LTC Geoffrey A. Crawford, during an Oct. 1 ceremony at contingency operating base Adder in Iraq. Gossett was recognized for spearheading the total revision of the Advanced Leaders Course field training exercise (ALC FTX) for career management field (CMF) 15 and implementation of 9 leader evaluations for the course. Also, for creating a partnership with AAAA and the Aviation branch NCOA supporting the AAAA Scholarship program and new members program. Gossett is returning to an aviation intermediate maintenance (AVIM) armament platoon sergeant position at Joint Base Lewis-McChord, WA.

Mid-Atlantic Chapter



CW5 Thomas Baker, 244th Theater Aviation Brigade, was inducted into the Honorable Order of St. Michael, Bronze, by brigade commander, COL Michael E. Claybourne, at a ceremony on Sept. 9 at 244th TAB headquarters. Baker was recognized for his outstanding service as the brigade command chief warrant officer and aviation safety officer North Star Chapter



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On Sept. 29, at the Army Aviation Support Facility #2 in St. Cloud, Minnesota, *SFC James K. Edwards, Jr.* (left), a UH-60 and CH-47 mechanic with the facility, was inducted into the Honorable Order of St. Michael, Bronze by COL Michael J. Huddleston, the 34th Cbt. Avn. Bde. commander, State Army Aviation Officer, and North Star Chapter president. Edwards was recognized on the occasion of his retirement for his outstanding support to Army aviation with 30 plus years as a mechanic and crew chief on AH-1, CH-47, OH-58, UH-1 and UH-60. He will be retiring to Harlingen, Texas.

Prairie Soldier Chapter



Payton Hamburger, the daughter of *SGT Patrick Hamburger*, receives the medallion of the Honorable Order of St. Michael, Bronze from Nebraska Adjutant General, MG Judd Lyons at a

SGT Hamburger posthumous induction ceremony during visitation in a Lincoln, NE funeral home on Aug. 18. Payton's father was the flight engineer on a CH-47 from Company B, 2nd Battalion, 135th Aviation Regiment (General Support Aviation) (Colorado and Nebraska ARNG) that was shot down by a rocket propelled grenade on Aug. 6 in Afghanistan killing all 38 on board.



Show Me Chapter



LTC Kevin S. Bayliss was inducted into the Honorable Order of St. Michael, Bronze and his wife, Vikki, into the Honorable Order of Our Lady of Loreto at a retirement ceremony on Sept. 25th at the 1107th Theater Aviation Sustainment Group (TASMG), Missouri Army National Guard (ARNG) facility in Springfield, MO. Bayliss distinguished himself through outstanding service over the past 25 years during which he held every possible leadership position from platoon leader to his current assignment as battalion commander in the 1107th TASMG. He is a maintenance test pilot for the UH-1, UH-60, and OH-58 with over 900 accident free hours. Vikki received her recognition for dedicated support of her husband and the Soldiers and families in each unit chain of command over their 25 years of service. They will reside and work in the St. Louis, MO area.



CW5 Andrew I. Gregory was inducted into the Honorable Order of St. Michael, Bronze and his wife, Cherie, into the Honorable Order of Our Lady of Loreto at a retirement ceremony on Sept. 30th at the 1107th Theater Aviation Sustainment Group (TASMG), Missouri Army National Guard (ARNG) facility in Springfield, MO. Assigned as the quality control section leader for Co. A, Gregory was recognized by maintenance officer, MAJ Vaughn L. Brown, for over 25 years of outstanding aviation service and dedicated support to the Nebraska and Missouri ARNG. He has served as an aviation safety officer, instrument flight examiner, instructor pilot in OH-58, UH-1, and UH-60, maintenance test pilot in the UH-1 and 60 and as a pilot in C12 and C23 aircraft. Cherie was recognized in sincere appreciation for her unswerving support of her husband and countless hours of dedicated volunteer service to the unit and family members. The Gregories will live and work in the St. Louis, MO area.

ARMY AVIATION

AAAA News

AAAA Chapter News

Jack Dibrell/Alamo Chapter

Chapter Scholarship Winners Recognized Scholarship winners from the Jack Dibrell/ Alamo chapter received their awards at a ceremony on Oct. 1 at the Army Aviation Support Facility in Austin, Texas.



From the left: COL (Ret.) and Mrs. Byron Howlick, grandparents of chapter scholarship winner, *Howlick Cohick;* COL Richard Adams, 36th Combat Aviation Brigade (CAB) commander and Dibrell/Alamo chapter president; and CSM (Ret.) Danny Dean, chapter VP for scholarships.



From the left: LTC (Ret.) Tom Grant, AAAA member; *Britney Grant,* chapter scholarship winner; COL Richard Adams, 36th CAB commander and Dibrell/Alamo chapter president; and CSM (Ret.) Danny Dean, chapter VP for scholarships.



From the left: LTC (Ret.) Tom Grant, AAAA member; *Kelsey Ogg*, winner of the Vietnam Helicopter Pilots Association, 361st Avn. Co. "Pink Panthers" Heritage scholarship; COL Richard Adams, 36th CAB commander and Dibrell/Alamo chapter president; and CSM (Ret.) Danny Dean, chapter VP for scholarships.



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From the left: LTC (Ret.) Tom Grant, AAAA member; *Tyler Ogg,* chapter scholarship winner; COL Richard Adams, 36th CAB commander and Dibrell/Alamo chapter president; and CSM (Ret.) Danny Dean, chapter VP for scholarships.

North Texas Chapter



The Dallas Cowboys Cheerleaders, together with chapter board members and volunteers, welcome golfers to the tournament hosted by the North Texas Chapter in Fort Worth during the 2010 AAAA Annual Forum & Exposition. Proceeds from the tournament are used to provide scholarships to chapter members. The chapter will offer another opportunity to support the scholarship program – and take pictures with the Dallas Cowboys Cheerleaders – at the 2013 AAAA Annual Expo in Fort Worth!

Tennessee Valley Chapter



The Tennessee Valley Chapter held their annual Fall Bob Vlasics Classic Bass Tournament on 16-17 September 2011 at the Elk River Group Lodge in west Athens, AL. This two day event saw 15 boats take to the water near Elks Lodge. Big Bass on day one was the team of Quintin Thompson and Ricky Kleager; and the second day Big Bass was the team of Taylor Vinson and Matthew Sharman. The two day tournament winner was the team of Quintin Thompson and Ricky Kleager (pictured from left). The chapter thanks the 13 corporate sponsors who supported this event: Aerodyne, Avion, Cargo Bass club, DRC, Dynetics, GORE, SAIC, Triumph Group, Robertson Fuel Systems, Russell Associates, VT Group, Westar and Yulista.



Mr. Ted Whitney (right), club president of Vets with Vettes and Corvette Owners presents Tennessee Valley Chapter president, Mr. Gary Nenninger, with a plaque for the TVC AAAA's generous support for the 2011 Spring Show Event held at Bridge Street Town Centre in Huntsville, AL on April 17. This was the Corvette Club's 7th annual event with 202 registered vehicles, over 1,500 spectators and raised over \$9,000 for charity.

CFC < CFC < CFC </p>

The AAAA Scholarship Foundation, Inc. provides annual scholarship support to hundreds of students seeking higher education.



The AAAA Scholarship Foundation, Inc. provides a variety of scholarships and no-interest loans to the Soldiers, NCOs, warrant and commissioned officers and to their family members. Your tax-deductible donation helps make a difference to those looking to further their educational opportunities and experiences. Please contribute to the AAAASFI through the Combined Federal Campaign program. Contribute to #10516.

Please see your unit CFC representative for details on participating in the 2012 CFC Program.



The AAAA Scholarship Foundation, Inc. 755 Main Street, Suite 4D Monroe, CT 06468-2830 (203) 268-2450
AAAA: Supporting the U.S. Army Aviation Soldier and Family

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Supercommittee Lumbers On

The Joint Select Committee on Deficit Reduction, now called the Supercommittee, began operations on Sept. 8 in response to the Aug. 2 Budget Control Act of 2011. By Nov. 23, the supercommittee is to recommend to the Congress at least a \$1.5 trillion deficit reduction program over a 10-year period. Then the House and the Senate are to approve the bill with an up or down vote by Dec. 23 before sending the measure on to the president by Dec. 23 for his up or down vote. Should agreement not be reached in this process, in accordance with the Budget Control Act \$1.2 T in automatic spending reductions will be triggered that include a \$500 billion cut for the Department of Defense.

Initially, the supercommittee heard public testimony from experts and members of recent and prominent cost reduction commissions. Many of the congressional committees responded by Oct. 14 to a data call for suggestions and recommendations while others across the country are continuing to send their advice. After several weeks of closed sessions, rumblings are being heard that the bipartisan 12-member committee from both houses is having difficulty establishing a process with the adequate "give and take" needed to achieve their goal on time. On the sidelines many are championing their issues.

Secretary of Defense Leon Panetta believes the automatic trigger cut of \$500 T from DoD is a doomsday mechanism. Meanwhile, major national credit rating agencies are expecting at least a \$2 T deficit reduction over 10 years.

Many are waiting for positive results.

Civilianization of Military Benefits

In Sept. 2011, the Office of Management and Budget released "Living Within Our Means and Investing in the Future, The President's Plan for Economic Growth and Deficit Reduction." This plan proposes major changes in military retirement, compensation and healthcare toward that of the federal and industry employees.

Interestingly, the retirement optimization notions seem to echo those in the Defense Business Board's "Recommendations to Optimize the Department's Military Retirement System" discussed over the summer and released in Oct. The dichotomies include the president saying cuts will not be made on the backs of our veterans, while a non-participative Base Realignment and Closing (BRAC) procedure is to be used in making major changes to the retirement system that includes many of the same veterans.

Clarifications have been made by prominent decision makers that current servicemembers and retirees should be grandfathered from such retirement benefit cuts. In the eyes of many this approach shows a harsh insensitivity to the radical difference between military and civilian



careers and the reasons why these military programs were built.

Views vary widely in Congress. Chairman Buck McKeon of the House Armed Services Committee strongly supports not making further cuts in defense while Senate Armed Services Committee Ranking Member, Sen. John McCain (R-AZ), is supporting a range of benefit changes and cost efficiency cuts. In support of the servicemembers, GEN Martin Dempsey, in his first testimony as the new Chairman of the Joint Chiefs of Staff, said that he would "outright reject" any effort to equate civilian and military retirement programs.

With all of the parts of the budget and entitlements apparently open to cuts by the supercommittee and Congress, the TMC is sending letters to Congress and placing advertisements in Washington, D.C. publications stressing the unique nature of the military profession and the need to maintain a strong national defense.

Deficit Funding Bill Due in November

After the extremely troublesome passing on Aug. 2 and Oct. 5 of government deficit spending bills needed to fund government operations, another challenge looms. Leaders of both houses have said they hope to reach agreement on a longer term measure before Nov. 18 when government funding would otherwise expire. Issues remain with the House strongly supporting Defense spending and the Senate favoring large expenditures in the departments of Labor, Health and Human Services and Education.

U.S. Troops To Leave Iraq By Year End

On Oct. 21 after a video conference with Iraqi Prime Minister Nouri al-Maliki, President Barack Obama announced that all U.S. fighting forces will depart Iraq by the end of 2011 as planned. Months-long negotiations between the U.S. and Iraq failed to reach agreement on the legal status for carry-over U.S. training and special operation forces to remain.

Although the Iraqis have made considerable progress with the capability of their 600,000 troops, they are viewed to still lack vital intelligence, logistics, naval and air power to meet possible external and internal threats. The U.S. expects to continue discussions with Iraq on offering training and assistance, as we have done with other countries, to support a stable and self-sufficient Iraq.

2012 COLA Approved

On Oct. 19, the Social Security Administration approved a 3.6 percent Cost of Living Allowance adjustment that is tied to the Consumer Price Index for 2012, the first since 2009. The same day Chairman Patty Murray (D-WV) of the Senate Veterans' Affairs Committee announced the passage of the bill she sponsored for a Veteran's COLA in the same amount for retired pay, veterans disability compensation, and dependency indemnity compensation.

Retirees are to receive their first 2012 COLA as a part of a 13th monthly 2011 payday on Dec. 30. This change in the pay schedule, normally scheduled for Jan. 3, is necessitated by the 2011 National Defense Authorization Act that requires military retiree paydays to be moved to a previous business day if the first day of the month falls on a weekend or a holiday. Those who expect this 13th 2011 payday are alerted to examine their tax liability and react accordingly.

Military Pay Raise

Currently serving personnel are scheduled to receive a 1.6 percent pay raise in Jan. Active and reserve component pay raises are tied to private sector pay growth in order to maintain pay compatibility. (�)

C-27J In-Play Again

Reliable reports have the C-27J Joint Cargo Aircraft returning to the Army. A major issue is obtaining much of the funding that went with the aircraft to the Air Force from the earlier joint program led by the Army.

MC-12W Requested To Stay With USAF

Air Force Secretary Michael Donley and Army Secretary John McHugh in an Oct. 20 letter strongly urged Chairman Carl Levin of the Senate Armed Services Committee that the MC-12W Liberty fleet remain with the Air Force.

Rationale included not interrupting combat operations in Afghanistan and not requiring extensive modifications to mount the Guardrail equipment. A recent version of the 2012 Defense Authorization Bill directed the transfer of these intelligence, surveillance, and reconnaissance aircraft to the Army as replacements for the RC-12 Guardrail Platforms.

The issue is expected to be decided by a House and Senate conference committee.

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NEW MEMBERS

Air Assault Chapter CW3 Jeeff Robitaille 1SG Richard T. Vendl Aloha Chapter 1LT Blake David Brostrom Arizona Chapter COL Matthew James Brown MSG John A. Kunkle Ms. Connie Stevens **Aviation Center Chapter** 1LT Albert P. Alston 1LT Michael B. Anthony 2LT Brian R. Baker 2LT Ward E. Baker WO1 John M. Barnes CW3 Stuart Bennett 2LT Dustin M. Butler 2LT Alex J. Chaffee 2LT Kevin H. Chapla MSG John S. Collins WO1 Kevin S. Coppins WO1 Freddy Cortes CPT Ricky Cotto MAJ Scott Thomas Crawford MAJ Nicole Dean 2LT Jesse L. DeJaynes SSG Justin S. Dotson 2LT Christopher M. Dudley

2LT Derek T. Duhoux WO1 Efren D Enrile Jr. WO1 Thomas L. Flaherty Scott J. Flux CW3 Timothy A. Fox, Ret. WO1 Chris M. Gasser CW5 Paul George WO1 Isaac Gomez 2I T Benito Gonzale Jr 2LT Ryan L. Granier 2LT Garland T. Green 2LT John B. Griffin WO1 Robert G. Hansen MAJ Anthony R. Hanson MSG Antonio L. Harrison SFC Jennifer Y. Hernandez 1LT Mark C. Hoffman WO1 James D. Hooper 2LT Jay H. Hosack WO1 Anthony J. Impastato 2LT Charles B. Jaeger WO1 Jonathan M. Kilcullen WO1 Emily S. King WO1 Cory H. Lagusker WO1 Darrell C. Lesikar WO1 John G. Linn WO1 Nathan D. Mack Chris B. Macpherson 2LT Adric S. Maverius

WO1 Michael A. McClary Jr. WO1 Benjamin J. McKay WO1 Angel V. Medina SSG William J. Morgan WO1 James L. Morter WO1 Allison M. Moser CPT Laura A. Naigle WO1 Christopher J. Nicholas WO1 Tyler A. Nixon WO1 Coleman O. Norris WO1 Steven K. Odland WO1 Jonathan B. Oldham WO1 Erik E. Olsen 2LT Glory D. O'Neil 2LT Richard C. Ortmann WO1 Samantha L. Palmer WO1 Anthony Paolucci 2LT Charles E. Pendry WO1 Anthony C. Picanso 2LT Thomas C. Pichette WO1 Craig S. Plantrich WO1 Stephen M. Prince WO1 Dennis M. Proell WO1 Thomas A. Robey WO1 Cody T. Schonover 2LT James P. Schumacher WO1 Tyler R. Sepp WO1 Brett E. Sharp 2LT Eric S. Shirley WO1 Rafael D. Sifuentes WO1 Charles D. Simmer WO1 Cody L. Smith

*

WO1 Joshua R. Spinler 2LT Austin M. Storms WO1 Daniel C. Tjalsma CW4 Darrin Tolleson WO1 Hoang V. Tran 2LT Michael D. Verdun 1LT Lan D. Vo SGM Eric Ikusaburo Wainwright WO1 Justin C. Walker WO1 Kenneth B. Watson WO1 Brad J. Weaver WO1 Jonathan D. Welter WO1 Christopher B. Whittle WO1 Kyle S. Wilson 2LT Morgan J. Wood WO1 Matthew B. Worley Michael R. Zanders **Big Red One Chapter** SGT Daniel Acevedo CPT Monte Monroe Miller Cedar Rapids Chapter Mark R Hasara **Central Florida Chapter** MAJ Wilton Morales Christopher B. Stubbs **Colonial Virginia Chapter** SFC Michael Bingham SFC Paul B. Radford **Robert Yeates Connecticut Chapter** David DiGianvittorio

Chris Romanoff **Corpus Christi Chapter** Brenda K. Bartlev Amalia R. Ferguson David T. Figueroa Yelitza A. Forte Corando Gallegos Maria C. Gallegos Marc A. Gonzalez Steve Guzman Michelle D. Hamil James P. Harvey Maher Hedhili Jesus M. Hernandez Brian Holt Ken Long Richard J. Lucio John L. Magill Kevin R. Martin Christopher McGovern Norma L. Montiel Daniel P. Phelan Ernest A Powell CDR Karl A. Rader, Ret. Debra M. Ramirez Becky Rector Bobbi M. Reyna Roy L. Roberts Lvnda L. Sanchez Jaime Segovia Rosa Maria Segovia Guadalupe G. Šilguero

N E W S S P The Mighty Chinook: 50 and Still Going Strong By Sofia Bledsoe

While most platforms are normally scheduled to retire after 50 years, the CH-47 Chinook helicopter was recognized for its 50th year in service during an anniversary ceremony September 21, exactly 50 years since the Army's first flight of the aircraft, in the Chinook production facility at the Boeing plant in Ridley Park, Philadelphia, PA.

Originally designed to haul the Honest John missile, the Chinook helicopter continues to prove its importance and relevance in today's fight. The CH-47 Chinook is the U.S. Army's only heavy lift helicopter and continues to be vital to Overseas Contingency Operations and America's Homeland Security needs as a critical asset for transporting troops, supplies, and providing various combat support, and combat service support operations. Its secondary missions include MEDEVAC, aircraft recovery, disaster relief, and search and rescue.

The Army has continued to make updates to the Chinook fleet in order to improve combat effectiveness with more on the way. A Cargo Onload/Offload System (COOLS) with a new armor configuration is scheduled for FY 2013, and a new blade configuration that will add approximately 2,000 pounds of lift capability.

The newest Chinook, CH-47F, incorporates key reliability and maintainability improvement modifications, such as a new machined airframe, vibration reduction, digital source collectors, T55-GA-714A engine, Common Avionics Architecture System (CAAS), enhanced air transportability, Digital Automatic Flight Control System (DAFCS), and is compatible with joint digital connectivity requirements. In addition to improving the aircraft, a New Equipment Training system brings the training of pilots from D to F models to where the Soldiers are located, allowing Soldiers to



Army and Boeing leadership celebrate the Chinook's 50th year in service and commemorate the event with a ribbon cutting of the new Boeing H-47 facility at Ridley Park, Philadelphia, PA. From the left – COL Pat Tierney, Dir. of Army Aviation, G-3; MG Anthony Crutchfield, commander of the U.S. Army Aviation Center of Excellence; Leanne Caret, VP of Boeing H-47 programs; COL Bob Marion, Proj. Mgr. for Cargo Helicopters; MG William "Tim" Crosby, Program Executive Officer for Aviation; Jeanne Chamberlin, Boeing VP and Gen. Mgr. of Mobility; CPT Steve Labows, Defense Contracting Mgmt. Agency, Boeing in Philadelphia; and COL Patrick Mason, Technology Applications Program Office Proj. Mgr.

spend more time with their families.

No matter what the Army needs in the future, the CH-47 Chinook remains vital to missions around the globe.

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

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Judith A. Stephens Ross P Tipton Gina D. Vera Shirley Verastiqui Kenneth A. Weeks **Flying Tigers Chapter** MAJ Michael Lee Vicars Frontier Army Chapter MAJ Brian Anthony Chesser Jeffrey R Holcomb Greater Atlanta Chapter MSGT Bill Brockman Farrell Marie Garth **Greater Chicago Chapter** SFC Mark A. Nauyokas, Ret. Jack H. Dibrell/Alamo Chapter Derrick W. Muschalek 1SG Robert Anthony Quinn Scott A. Rose SGM Christopher S. Sweeney MAJ William Taylor Jimmy Doolittle Chapter WO1 Antonio D. Montgomery **Keystone Chapter** SPC Christopher Herring CPT Gregg A. Tripp Land of Lincoln Chapter CW4 Tammi M. Bowman, Ret. MacArthur Chapter James E Burke **Mid-Atlantic Chapter** SGT David W. Barnhardt Keeler O. Bowker-O'Brien SSG Gamaliel Burgos SPC Sara E. Bush SSG Daniel W. Campbell Sharon K Chapman Teri Doane Matthew N. Dobies Jason D. Dooney PFC Jay M. Eberhardt PFC Kevin Fields SPC Raymond E. Fleming SSG Chante L. Harris PV2 Peter S. Hollands Carrie Jenkins SSG John D. Jeter CPT Michelle D. Johnson MSG Raymond A. Johnson SPC Andrea R. Jones SPC Jamiylah Lawson SFC Tracy G. Lee SFC Tyrone E. McGlotten MSG Carl R. McKlveen SPC Russell A. Meadows SPC Phu P. Pham SGT Jeremy M. Pryor SFC David J. Shaina SSG Donald K. Snyder SSG Jason G. Suchodolski SSG Jennifer M. Suchowski SGT Kristy Marie Sumner Amy Walker Victor P. Zembruski Mount Rainier Chapter SFC James Alwin Burge CAPT Douglas Malat, Ret. WO1 Joseph N. Tyson Narragansett Bay Chapter SGT Raymond Batalon SGT Ricky Bouchard PFC Casey Cianci SGT Richard Dilorenzo SGT Daniel Fischer SSG Paul Hanley SSG John Pearson SGT Ronald Spears

North Country Chapter CPT Jason Brubaker CPT Wesley R Cannon SGT Gilberto Figueroa SFC David Oberheuser North Star Chapter SPC Amanda R. Kazmierkoski CPT Shaun Gregory Meling CPT Marc L. Rassler CPT David Wagner North Texas Chapter Jan Dorn Johansson Northern Lights Chapter CW4 Flor Armendariz SFC William Parry Hughes CW3 Christopher John Videau 1LT Kevin Wood **Phantom Corps Chapter** CPT Brent Hayward James Love II Ret. CW2 Rahjar Roamartinez SFC Derrick Salter **Pikes Peak Chapter** CPT Andrew C Bickhard SPC Kira L. Kering SPC Anthony T. Livas SPC Billy R. Robinson SSG Tyrone D. Stovall Prairie Soldier Chapter Troy Lee Hines COL Thomas E. Schuurmans Ragin' Cajun Chapter CW4 Dan S. Wolin Rio Grande Chapter LTC Christopher Barnwell CW5 Kevin E. Smith Savannah Chapter 1LT Kathryn Joyanna Munera Stonewall Jackson Chapter SGM Lester A. Kipp Tarheel Chapter WO1 Chapin W. Thomas Tennessee Valley Chapter SGM Hanson L. Clark. Ret. James Hale LTC Lance Boyd Koury Robert R. Wilson Virginia D. Young Thunder Mountain Chapter 1SG Alex W. Barber, II Ret. SSG Wesley R. Hewitt Jr. Ret. WO1 James M. Shaw LTC John William Watters Jr. Volunteer Chapter Ricky Clark CW2 Brian L. Metzler Voodoo Chapter Frank D. Natal Jr. Washington-Potomac Chapter WO1 Luke C. Anderson CW5 Stephen Heaton BG Daniel Nelan Brandon J. Pollachek MAJ James Rae CPT James Lee Smith CW3 Bruce A Stewart Glenn D.Tiongson, USAR Ret. CW5 Clarence Leon Wilson III No Chapter Affiliation Victor N Altamirano 1LT Cody Anfinson WO1 Cody Benavidez MAJ Brock Benedict Ran Benjamin LTC Clinton Conzemius

WO1 Brandon D. Davis Paul S DeBruyn CW2 Anthony Del Grosso WO1 Michael J. Gelsomino David T. Guthrie II William Hudgens WO1 Sirsedrick C. Kendrick MAJ Christopher J Kirk WO1 Joshua M. Lyon WO1 Jamie B. Mishler WO1 Steven R. Mullins Ashlae Ann Nelms CW4 Gene A. Newton, Ret. CW3 Joshua C. Runyan Phil Sharitz WO1 Jeffery E. Sliger WO1 Jeff A. Smith WO1 Andrew J. Stuebbe WO1 Patrick W. Stueve COL William J. Thomas Jr. LOST MEMBERS Help us locate a member on this list and receive a one month extension to your AAAA membership. SGT Kevin Adams SPC Markie B. Allen SGT Jeremy R. Archer MSG Christopher L. Arnold SPC Douglas J. Auchus MAJ Steven B. Barrier Jr. James F. Baxendale SPC Eric R. Beckman CPT Michael R. Beissinger 2LT Matthew Craig Belanger Simon Boutin 2LT Christopher K. Brown SPC Derek L. Burton 1LT Jason S. Burton WO1 Todd W. Cahill SPC Christopher Campbell WO1 Timothy D. Carroll SPC Curtis K. Chandler SPC Keane D. Church 2LT Kasandra A. Clark WO1 Richard P. Corley

Fallen Heroes

AAAA is saddened to announce the loss of the following soldier serving in support of the global war on terrorism.

OPERATION ENDURING FREEDOM

The Department of Defense announced the death of a soldier who was supporting Operation Enduring Freedom.



SSG Robert Brian Cowdrey, 39, of Atwater, Ohio, died Oct. 13 in Kunar province, Afghanistan, from injuries suffered during combat operations. He was a flight medic assigned to Company C, 3rd Battalion, 82nd Combat Aviation Brigade, 82nd Airborne Division, Fort Bragg, N.C.

SSG Cowdrey

Information from Defense Department news releases and other media sources.

SGT James C. Cunkelman SPC Michael A. Dale

SPC Nicky D. David Mr. Harlie Ryan Dockens 2LT Brock J. Doll PFC lasha P. Dorris SPC David Dowling SGT Gilberto Figueroa CW2 Ruben Jose Foster SSG David A. Garcia 2LT Anna H. Gardner PFC Jessica B. Gonzales WO1 Kerry M. Gonzales SGT Kyle Grant SFC John C. Graves SPC Ashley D. Havercamp PV2 Jenelia M. Hawkins SFC Brian S. Hedden 2LT Joshua T. Hicks SGT Timothy Hitesman SPC Codi C. Hodges WO1 Brett H. Jenkins SPC Aaron M. Johnson SGT Rolf A. Karlstad PFC Samba Kebbeh SPC Justin C. Kelley SSG John J. Kerins SSG Latonya S. King PFC Tara R. Kiss CW5 Bart Knies Franklyn Konarik CDT Jacen P. Lanclos SPC Diego Landin CW3 Jesse Whitcomb Lee SGT Jeremy B. Lewis SPC William R. Long SPC Marvin R. Lopez CW2 Philip Marlon Louis 1SG Jon A. Martin CW2 Eric A. Matthews CW3 Matt M. Matthews 1SG Micheal H. McCann SFC Anthony P. McFarland SPC Cavin B. McKen LTC Robert W. Michel, Ret. SSG Christopher Scott Milam CDT Kyle W. Miner CPT Jeffrey P. Moore SGT Derek L. Most PFC Jack T. Mulludes

WO1 Matthew R. Muntifering CPT Kyle Murray CW3 Stephen S. Napoli Chad T. Nicklaus CW5 Robert J. Novak Jr. 2LT Matthew P. Nulk CW2 Taylor Oliver SGT Ryan M. Olsen SPC Brittany N. Ortega 2LT Andres F. Pazmin SGT Cain Perryman SPC Phu P. Pham SPC Daniel B. Phillips PFC Nickalus C. Raines PFC Curt Reece SPC Jordan D. Reed SPC Shannah D. Reid SGT Keith L. Rhodes SGT Milton A. Rivera SPC Carlos A. Rodriguez SPC Patrick E. Russell WO1 Michael R. Sawyer PFC Jeffrey E. Schanz WO1 Matthew P. Siegel CDT Christopher W. Simpkins CDT William R. Small SPC Robert J. Stanley SPC Dustin E. Stcin Timothy Michael Steckel SPC Ryan J. Stevenson SPC Deanthony C. Stokes SPC Edward B. Stoner Jr. SPC Joseph A. Stroud SPC Jason D. Sulser PV2 Derek T. Talbott SGT Humberto Toledo PFC Lyons Travis CDT Érica L. Triebenbach Kathryn Tutin SPC Alex Tyson III Isidore Venetos LTC Michel Villeneuve CPT Robert H. Wells SSG Ahmad R. Williams SGT Eric-Wesley J. Wilson PFC Courtney Wise WO1 Anthony J. Wozniak

ARMY AVIATION

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Ms. Cheryl Crawford

CW2 Stephen H. Crews

AAAA News



NEW ORDER OF ST. MICHAEL RECIPIENTS

Gold

MG John F. Campbell

SILVER CW5 Mark R. Musselwhite CW5 Robert A. Stolting COL Terence W. Reeves COL Robert C. Doerer CSM David Perkins CW5 Art Blakemore LTC Scott J. Rauer COL Joseph B. Jellison CW4 Timothy S. Offutt COL Frank M. Muth COL Randolph R. Rotte Jr. COL Russell E. Stinger COL Thomas E. Fleming, Ret. CW5 David P. Clark

BRONZE

COL Tristan Atkins CPT Jeffrev P. Bottrell CSM David Eden SFC James A. Burge CW3 Frank A. Buoniconti CW3 Lawrence E. Eddingfield CW4 Thomas A. Thompson Michael E. Buhidar Jahna D. Fulton LTC Richard J. Stroyan LTC James K. Cooksey, Ret. MAJ Mark A. Bliss LTC Michael W. Newell 1SG James Inman 1SG Nathan Mahaney 1SG James T. Hall LTC Richard Watson MAJ Barton Johnke LTC Jeff Amos MAJ Timothy Hummel MAJ John Bartholomew CW3 Scott A. Sherman CW5 Leroy D. Klintworth Jr. CW5 Michael R. Richardson SFC Charles E. Gossett SFC Ronald E. Stimpert LTC Jack H. Thompson, Ret.



NEW KNIGHT OF ST. MICHAEL RECIPIENTS

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

SOLDIER OF THE MONTH

SPC Brandon Davis October 2011 North Country Chapter

PFC Chelsea McKinney September 2011 Morning Calm Chapter

ACEs LTC Edward L. Carnes, Ret. *Mid-Atlantic Chapter*

NEW CHAPTER OFFICERS

Aloha Chapter LTC John McAfee, VP Activities

Embry Riddle Eagle Chapter LTC Garret Messner, President

Griffin Chapter

COL Van Voorhees Jr., President; CSM Michael Clowser, VP Enlisted Affairs; LTC Daniel Ruiz, VP Membership; CPT Azizi Wesmiller , VP Awards; CPT Richard Bustamante, VP Scholarships; CPT Melanie Mansbach, Treasurer; LTC Christian Huettemeyer, VP Katterbach; CW5 John Pratt, Event Coordinator Katterbach; SSG Sterling Dunaway, Event Coordinator Illesheim; CW4 Glenn Shepard, Event Coordinator Coleman **Mount Rainier Chapter** CPT Timothy Toerber, VP Programs, VP Scholarship

(�)

Thunder Mountain Chapter LTC John Watters, Senior VP (305th MI Bn); LTC Victor Hamilton, Senior VP (2nd BN, 13th Avn Regt)

NEW LIFETIME MEMBERS

CPT Charles J. Beyer 1SG Phyllis J. Combs MAJ Thornwald E. Eide, Ret. CW3 Mark A. Howdeshell, Ret. LTC Mark McPherson, MD CW3 Bruce A. Stewart MAJ David A. Zeller Jr.

NEW INDUSTRY MEMBERS Eclypse International Corp.

Genesis 3 Engineering Foxtronics, Inc. ID Integration, Inc. Media General

IN MEMORIAM

COL Dale W. Taylor , Ret. COL Earl M. Yerrick Jr., Ret.

Attention AAAA Members Stay Connected!

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ARMY AVIATION



MISSING ISSUES

We are in the process of electronically archiving ARMY AVIATION magazine. Listed below are the missing issues by year and month. We would greatly appreciate if any of our readers have access to any of the issues listed, that they contact Peter Orkin at the National office (203) 268-2450.

1953	JAN, FEB, MAR, APR, MAY, JUN, JUL, AUG, SEP
1954	DEC
1955	ALL Months
1956	JAN, FEB, MAR, APR, MAY, NOV, DEC
1959	FEB, AUG, SEP, NOV
1960	APR
1965	FEB, MAR, APR, MAY, SEP
1966	MAR, OCT, NOV, DEC
1967	JAN, FEB, MAY, DEC
1968	JUL
1969	JAN, SEP, OCT
1970	MAR
1977	DEC

ARMY AVIATION

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

UPCOMING EVENTS

DECEMBER 2011

Dec 14-16 AAAA UAS Professional Forum, Arlington, VA

JANUARY 2012

Jan 14AAAA National Awards Committee Selection Meeting, Arlington, VAJan 23-26Aviation Senior Leaders Conference, Fort Rucker, AL

FEBRUARY 2012

Feb 8-9Joseph P. Cribbins Aviation Product Forum, Huntsville, ALFeb 11-14HAI Heli-Expo, Dallas TX

APRIL 2012

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

MAY 2012

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

ARMYAVIATION UPCOMING SPECIAL FOCUS:

ARWWAVIATION December



ARMYAMATION

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**

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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 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 costers, etc. Failure to turnish information may result in members not receiving the Monthly Magazine, ballots, letters and other correspondence of impor- tance 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 SN 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 PEBD(mmddyyyy) Address Date Birth (mmddyyyyy) City State ZIP+4 Home Tel	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 In HOLD a Warrant issued to me by the Secretary of the Army In HOLD a Warrant issued to me by the Secretary of the Army (If NO check Associate above) I HAVE HELD a Warrant issued 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 Yr s \$74 3 Yr s \$111 5 Yrs \$185 PLEASE NOTE: Effective 1 January 2011 the monthly USAWOA NEWSLINER will be delivered electronically. If you wish a paper copy via mail please check here and include an additiona \$12 per year with your dues payment. Check or Money Order for dues is enclosed, made out to "AAAA". Charge my: VISA MC AMEX
Spouse (First Name) FAX Tel:	Credit Card# (No DEBIT) 3 digit sec. code Expires mm/yy CHAPTER AFFILIATIONS (Check one)
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 pro-	Please affiliate me with the chapters near my home. Affiliate me with theChapters Please DO NOT affiliate me with any specific chapters.
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ARMY AVIATION

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



25 YEARS AGO NOVEMBER 1986

Adieu, Dale Kesten

Incoming Editor-in-Chief, Lynn Coakley, paid tribute to outgoing Managing Editor, Dale Kesten. Dale had introduced the editorial format which included reports concerning recent

developments within Army Aviation. "These dynamic easy-to-read field reports have proven very popular and represent an invaluable source of information from key offices, agencies and operational units worldwide," observed Coakley. Dale Kesten will be leaving Army Aviation magazine on January 1. Incoming Managing Editor will be John Kiernan.



82nd Aviation Brigade Activation



Activation of the 82nd Aviation Brigade will take place on 15 January 1987 on the Main Post Parade Field of Fort Bragg, N.C. The ceremony will include the inactivation of the 82nd Combat Aviation Battalion. Any persons previously affiliated with any aspect of the aviation units within the 82nd Airborne Division are invited to participate in this event. Contact: MAJ Samuel Massenberg at: (919)

396-9435/6; or AUTOVON: 236-9435/6. Or write: Commander, 82nd Aviation Brigade, ATTN: S-3, Ft. Bragg, N.C. 28307-5100.

Tiltrotor for the Army

The Bell-Boeing MV-22 Osprey Program is on contract for full scale development. Osprey is a Navy program slated for joint service use. Planned procurement by the DOD is for 913 copies. Of this total, 231 MV-22As—the Marine Corps version—will go to

the Army. Osprey is a multimission tiltrotor aircraft which will provide the Army with enhanced capabilities for such duties as medical evacuation, high-priority, long-range logistics and Special Forces transport.







50 YEARS AGO NOVEMBER 1961

Reverse Lend-Lease?

Adjoining photo depicts the ramshackle hangar used by the Army's MAAG unit in Tehran. The hangar was built by the Soviets in 1942 and is emblematic of a larger effort known August 25 1041 Angle Soviet forces

as Operation Countenance. August 25, 1941, Anglo-Soviet forces invaded Iran. Resistance was broken by September 17. The Persian Corridor was established as a lifeline of Allied supplies to the hard-pressed Red Army, desperately battling Hitler's hordes

on the front that would eventually decide the outcome of the land war in World War II. Iran's oil fields were seized to prevent a possible alliance with the Axis. Occupation of Iran flanked Turkey, diminishing the prospects of Ankara joining the Tripartite Pact. Occupation of Iran ended by May 1946.



Need a Mascot



The 13th Transportation Company is looking for a new mascot . . . another black cat. Previous symbol, Lucifer II, went AWOL. The unit's original talisman was a Korean feline with three legs, Lucifer I. So if you see a black cat walk under a ladder, and grab it, box it and post it by magic carpet to the 13th Transportation Company, care of APO 358, San Francisco.

Hermit Duty

Next time you hear someone gripe about a personnel shortfall, think of MAJ Leo F. Bergeron and SP/5 Howard C. Ware. This pair comprises the entire JUSMAAG unit in Greece. Despite this hermit duty, they have organized a weather reporting network by linking a string of Greek radar stations.

GREECE TWOSOME



ARMY AVIATION

NOVEMBER 30, 2011

DON'T UNDERMINE MILITARY CAREER INCENTIVES

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Why is the military America's most respected institution?

How has the all-volunteer force succeeded through 40 years of hot and cold wars?

Why have top-quality people pursued careers in uniform despite arduous service conditions few Americans will accept for one tour, much less for 20 to 30 years?

Because previous Congresses understood career uniformed service demands special retirement and health care incentives beyond those of civilians who don't prepay huge premiums of service and sacrifice.

Past scrimping on these core career incentives hurt retention and readiness in the 1970s and 1990s. Fixing those problems proved even more expensive.

Congress should learn from history, not repeat it.

THE MILITARY COALITION

Air Force Association Air Force Sergeants Association Air Force Women Officers Associated AMVETS Army Aviation Association of America Association of Military Surgeons of the US Association of the US Army Association of the US Navy Chief Warrant/Warrant Officers of the USCG Commissioned Officers Association of USPHS Enlisted Association of the National Guard of the United States Fleet Reserve Association Gold Star Wives of America, Inc. Iraq & Afghanistan Veterans of America Jewish War Veterans of the USA Marine Corps League Marine Corps Reserve Association Military Chaplains Association of the USA Military Officers Association of America Military Order of the Purple Heart National Association for Uniformed Services National Guard Association of the US National Military Family Association Naval Enlisted Reserve Association Non Commissioned Officers Association of the USA Reserve Enlisted Association of the US Reserve Officers Association The Retired Enlisted Association Society of Medical Consultants to the Armed Forces US Army Warrant Officers Association USCG Chief Petty Officers Association Veterans of Foreign Wars Vietnam Veterans of America Wounded Warrior Project



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