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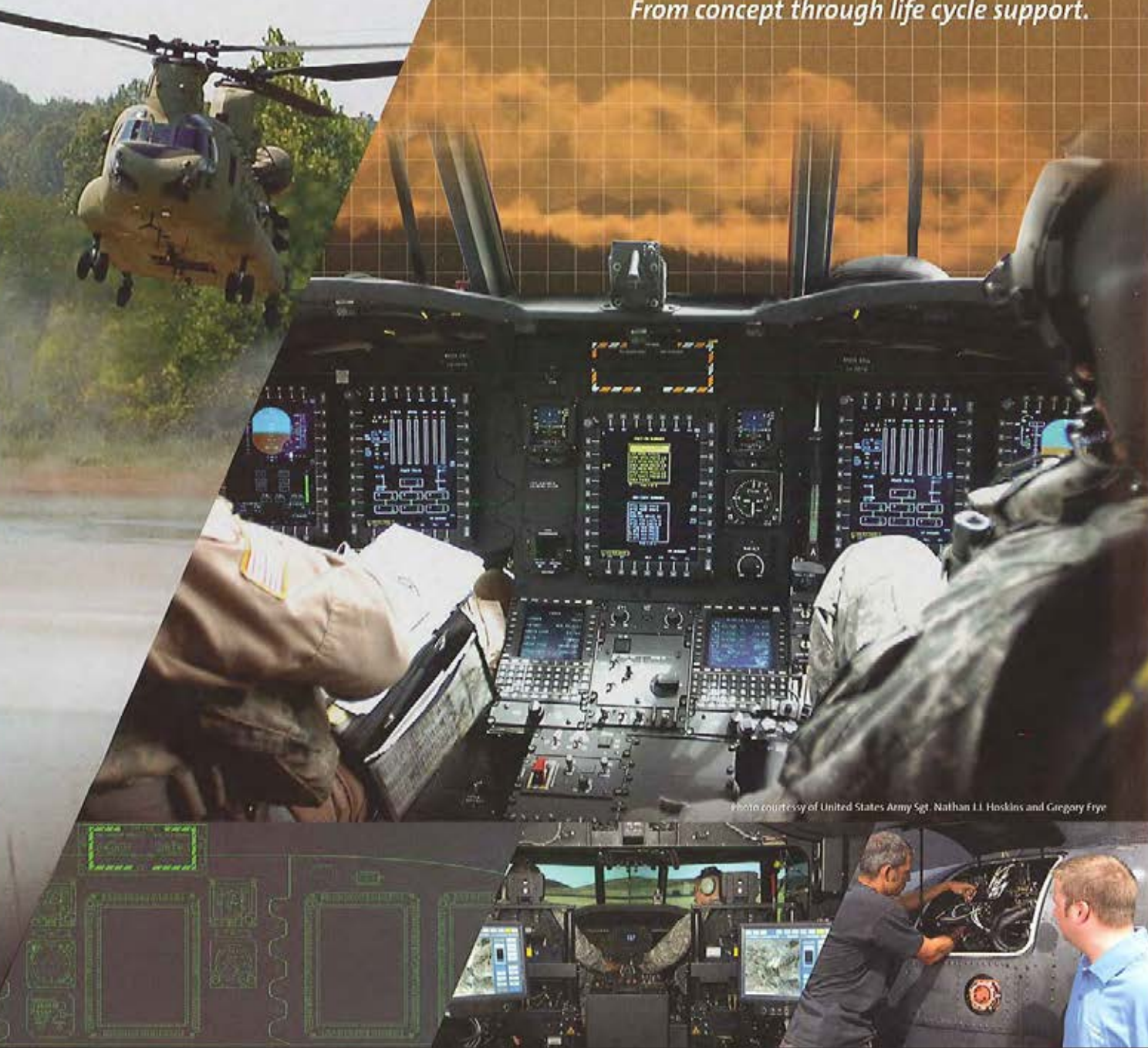


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ON THE COVER

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Briefings...

LATE-BREAKING NEWS ANNOUNCEMENTS NOTES

2009 Aviation Senior Leaders Conference Announced

The U.S. Army Aviation Center of Excellence will host the annual Aviation Senior Leaders Conference from Jan. 26-30 at Fort Rucker, Ala. The conference begins with registration and an icebreaker on Jan. 26. Full days are Jan. 27-29 and wrap up with a half day on Jan. 30. Conference information, registration and lodging support is available online at www.ruckerconference.com or by calling (334) 255-1330 (DSN 558) or e-mailing at aviationseniorleader@us.army.mil.

U.S. Considers Helicopter Sales to Iraq

The Defense Security Cooperation Agency briefed Congress in late July of a possible foreign military sale of helicopters, munitions, related equipment and services for the fledgling Iraqi Air Force. Under consideration is the sale of 24 armed helicopters, either the Bell 407 or Boeing AH-6; with 24 M299 missile launchers, 24 M280 rocket launchers, 24 XM296 .50 cal. machine guns, and 24 M134 7.62mm mini-guns. Ammunition would include 200 AGM-114M HELLFIRE missiles and 15,000 2.75-inch rockets. Other requirements include: test measurement and diagnostics equipment, spare and repair parts,

publications and technical data, personnel training and training equipment, U.S. government and contractor engineering and logistics personnel services, and other logistics support. The projected sales value could be as much as \$2.4 billion.

First UH-60M Battalion Fielded at Campbell

The 4th Bn., 101st Avn. Regt., was officially recognized as the Army's first UH-60M Black Hawk helicopter equipped unit with the delivery of the last aircraft during an Aug. 21 ceremony at Sabre Airfield, Fort Campbell, Ky. The historic event for the 101st Airborne Div. and for Sikorsky comes 30 years after the delivery of first UH-60A aircraft in 1978. "This is a great aircraft which significantly reduces the pilot's workload and better supports the Soldiers on the ground" said LTC James Benson, 4-101st Avn. commander. The 4-101st Avn. has been training with the UH-60M since December, logging over 2,700 hours, in preparation for an upcoming deployment to Afghanistan.

Corrections

In the May issue on page 39, in photo 35, we mis-identified MG James W. Nuttall, deputy director of the Army National Guard. Our apologies to the general.

AAAA National Award Nomination Deadlines

The following Awards will be presented during the 2009 AAAA Annual Convention, May 3-6, Opryland Gaylord, Nashville, Tenn.

Awards period encompassing January 1 - December 31, 2008. **January 1st deadline**

- | | |
|--|-----------------------------|
| ■ Soldier of the Year | ■ Outstanding Aviation Unit |
| ■ Joseph P. Cribbins DAC of the Year | ■ Active Aviation Unit |
| ■ NCO of the Year | ■ ARNG Aviation Unit |
| ■ Henry Q. Dunn Crew Chief of the Year | ■ Robert M. Leich Award |
| ■ Michael J. Novosel Aviator of the Year | ■ USAR Aviation Unit |
| ■ McClellan Safety Award | |

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AAAA President's Cockpit



We congratulate MG James O. Barclay III, our Aviation branch chief, on his recent nomination by President Bush and then promotion to major general.

Your AAAA National Executive Group is constantly looking for ways to help the Aviation Soldier and Family. Let me give you just a few examples of what we're doing. As always we also want to hear from you on how we can improve.

My first example is the AAAA awards program. Over 30 Soldiers, their units, and their families are honored every year. In September, we presented the Avionics award to an outstanding soldier, SPC Justin K. Duh, of Co. B, 412th Avn. Spt. Bn., 12th Cbt. Avn. Bde., from Katterbach, Germany. Specialist Duh provided critical depot and intermediate level maintenance support to elements of the 160th Special Operations Aviation Regiment, (Airborne), U.S Air Force and Navy during deployment to Operation Iraqi Freedom 07-09. As part of his great support, he solved a brigade level problem involving AN/APX-118 transponder malfunctions, a problem which had left CECOM personnel and other aviation technicians puzzled. Congratulations to Justin and his wife Sheri, the other half of this remarkable team.

Another example is our support to the local chapters. Since the first of this year, over half our chapters have requested and received from the National Office over \$70,000 in direct contributions for specific events like holiday parties and welcome home ceremonies.



AAPI PHOTO BY WILLIAM HARRIS

AAAA's 2008 Avionics Award recipient SPC Justin K. Duh is flanked by his wife Sheri and LTC Richard Muschek, Mike Mills and retired MG Robert Morgan, Cubic Defense Systems, following the Sept. 17 presentation of his trophy and certificate at the 2008 Team C4ISR Joint Symposium, Atlantic City Convention Center, N.J.

Another is our Order of St Michael program, our branch service award. Hundreds of Soldiers earn this award each year. AAAA allocated \$20,000 to start the OSM program 20 years ago. We've since also added the Order of Our Lady of Loreto to recognize spouses and others in the community who contribute so much to Army Aviation.

Scholarships are another huge AAAA benefit. Over 160 of you and your families received \$1,000 or more in AAAA scholarships this year alone through our AAAA Scholarship Foundation, Inc.

We are also striving to protect your future and benefits. COL Curt Herrick, Ret. and MG Carl McNair, Ret. lead our legislative activities in The Military Coalition, (TMC). And, in cooperation with Rhett Flater, Executive Director, American Helicopter Society, (AHS), we are looking to support research and development efforts by the Defense Department in rotorcraft technology to ensure that you always have the most capable aircraft in the world.

Finally, retired GEN Jack Keane and the AAAA Senior Executive Associates, a group of retired non-aviation 4-star general officers, advocate at the highest levels of government for your needs. They do this without compensation because they believe in AAAA, the Army, and most importantly...you, our Soldiers.

I believe we are getting a lot done, but of course, you are the ones making it happen. You are the volunteers who give hundreds of hours of your time. You write the nominations that result in the awards, the Saint Michael inductions, and the scholarships. You come to Washington twice a year and sacrifice your weekends to sit on AAAA scholarship selection boards and awards boards. And you run the local chapters and raise funds for our chapter scholarships through golf tournaments and other events.

So yes, AAAA does great things. But AAAA is really about you, our members. Thanks for all you do to make me and the rest of your leadership look good. We have not forgotten who really gets the job done...you do.

MG Jim Snider, Retired
AAAA President

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Conquering Challenges Facing the Army Aviation Branch

By MG James O. Barclay III

This past year has proven to be equally challenging and successful for Army Aviation. The transformation and resetting of our aviation formations were two significant challenges we faced while simultaneously remaining ready and relevant to the fight.

From my vantage point, 2009 appears to hold even greater challenges, but also promises greater rewards. Nevertheless, we will continue to support our formations and joint and combined partners across multiple theaters of conflict.

From a broad perspective, the Aviation branch is charged with two overarching missions in the coming year.

At the forefront is our mission of continued support in the Army Force Generation effort, managing forces currently engaged, and those soon to be engaged in conflict.

Second, we endeavor to shape and posture the branch for the future, both near- and long-term.

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As fiscal year 2009 begins, the U.S. Army Aviation Center of Excellence continues to work the challenges of the continuous demands on people, equipment and systems needed to support the nation. Here, a 4th Inf. Div. UH-60 Black Hawk helicopter, supporting the Multinational Division-Baghdad, leaves the forward arming and refueling point after gassing up Sept. 25 at Camp Taji, Iraq.

The continuous demands on our personnel, equipment and systems will make this a challenging yet achievable task. Mission success weighs heavily on our continuous efforts to find efficiencies and innovative concepts and mechanisms, which allow for an increase in our effectiveness with allocated resources as we strive to balance the force and its myriad tasks.

Synchronized efforts across our force, regardless of command or location, are imperative as we will continue to face resource challenges.

In light of this known challenge, I have charged the U.S. Army Aviation Center of Excellence team to develop a campaign plan for fiscal year 2009 that establishes guidance, priorities and strategies nested with the Army Campaign Plan and its vision beyond 2009.

After three months as your branch chief, I am convinced that we have the talent and expertise to accomplish these objectives and proceed into another 25 years as a branch of

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relevance that provides a significant impact in our nation's defense.

With a draft campaign plan in hand; I convened a USAACE leadership conference in September that included senior aviation staffers from the Department of the Army G-3/5/7, the Training and Doctrine Command and the Army Capabilities Integration Center.

As a result of some tough, very frank and challenging discussion and analysis, the collective team clearly laid out the scope of tasks facing us in the next year and set priorities.

More importantly, the many facets of our branch took a major step toward integrating our efforts and gaining an understanding of each organization and its mission.

We gained critical insights from those representatives from outside USAACE and succeeded in providing them an accurate picture of the scope of our mission.

As successful as the conference was, it is only a starting point for a journey that will demand increased coordination, innovation, dedication and a willingness to re-evaluate

our positions and plans to ensure we are fighting the enemy and not the plan.

We face some hard decisions in the coming year and we owe it to our leaders, our Soldiers and our country to maintain the high standards of training, equipment and support we have achieved in recent years.

As mentioned previously, I am continually impressed and humbled by the quality of our Soldiers, NCOs and officers with which we have filled the Aviation branch and the amazing work they do around the world every day.

It is because of your "can do" attitude that we continue to excel "above the best" when faced with any challenge.

Above the Best!



MG James O. Barclay III is the Army Aviation branch chief and the commanding general of the U.S. Army Aviation Center of Excellence and Fort Rucker, Ala.



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Please see your unit CFC representative for details on participating in the 2009 CFC Program.

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Chief Warrant Officer of the Branch Update



Proud and Humble to Serve

By CW5 Jeffrey A. Reichard

Editor's note: We welcome CW5 Jeff Reichard as the 4th chief warrant officer of the Aviation Branch. He assumed responsibility Sept. 1 from CW5 Randall Gant. We look forward to his contributions to ARMY AVIATION magazine.

To say that I am simultaneously proud and humbled to be the 4th chief warrant officer of the branch (CWOB) would be an understatement.

I am honored to represent all the Aviation warrant officers.

It is an extreme honor to work on the behalf of such a truly talented and professional force, a task to which I pledge my dedicated effort.

I am humbled to follow in the footsteps of three great Americans: retired CW5 Steve Knowles, the first CWOB; CW5 Brent Driggers, the second CWOB; and CW5 Randall Gant, our third CWOB.

During their tenure, each has advanced the interests of all aviation warrant officers, and Army aviation in general.

I thank them for their service, and look forward to continuing their great efforts as we continue to develop a strategy for the future.

I would also like to thank the Aviation Branch Chief MG James O. Barclay III, for choosing me for this unique opportunity to impact our great branch.

The CWOB position was initiated as a result of the recommendation by the Army Training and Leadership Development Panel, Phase III (the Warrant Officer Study), and empowered by a charter written in May 2002.

The charter outlines the duties of the Aviation CWOB and key among these duties are:

- Serving as the principle advisor to the Aviation branch chief on all matters concerning aviation warrant officers.
- Serving as an advocate and voice of AWOs at the highest levels within the branch and Army by addressing issues concerning personnel management, training and professional development.

I have had the opportunity to speak with warrant officer candidates and the young warrant officers in training here at Fort Rucker.

From the discussions, I have gleaned that we need to do our best to provide mentorship and positive role models throughout their Army career, but especially in the beginning years.

Additionally, I will be addressing the warrant officer education system, both from the restructuring aspect to availability of courses.

I welcome any constructive thoughts on this process.

What I expect from you:

- Set and maintain the standard.
- Keep up your professionalism, tactical expertise and motivation.
- Take ownership in leading and mentoring – each of these can be done up the chain as well as to subordinates.
- Let me be your advocate.

Please discuss your issues or ideas with your senior warrant officers, so that they can forward them to me; or you can contact me directly at: avn.cwob@us.army.mil.

Again, it is a sincere honor to serve the branch.

I look forward to seeing you and hearing from you.

Above the Best!



CW5 Jeffrey A. Reichard is the new 4th chief warrant officer of the Aviation Branch, U.S. Army Aviation Center of Excellence, Fort Rucker, Ala.

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Getting the Uniform Right for Our Aviation Warfighters

By CSM Donald R. Sanders

Our Army and branch is in the midst of an aviation flight uniform transition.

Back in 2006, the Army began issuing the *Army Aircrew Combat Uniform (A2CU)* to units deploying to operations in Iraq and Afghanistan in Southwest Asia.

Along with that action, the All Army Activities (ALARACT) message #136-2006 specified the mandatory use of the 100 percent cotton, green T-shirt for Soldiers with jobs associated with flame risks or hazards when wearing the A2CU.

More recent changes in 2008 include an ALARACT message #154-2008 specifying a wear out date of Oct. 1, 2009 for the current one-piece tri-service sage green flight suit and the Aviation Battle Dress Uniform (ABDU).

Another change was the recent memorandum signed by the director of Army Aviation, dated Oct. 4, 2008, approving the wear of the flame resistant *Army Combat Shirt (ACS)* for our aircrew members. See figure 1.

The current version of the ACS does not include a flap to cover the pen/pencil pocket; but future versions will include a pocket flap to prevent loss of writing utensils – which are potential foreign object damage items during flight operations.

Last, changes were not limited to just uniforms, but also included boots.

The Army has three types of boots approved for wear by aircrews conducting flight operations and include: the *Army Combat Boot* (hot weather, flame resistant); the *Army Combat Boot* (temperate weather) Type II, previously called the “Infantry Combat Boot;” and the *Intermediate Cold Weather Boot* with removable liner, Type I – tan color. See figure 2.

There are commercial-off-the-shelf

Army Combat Shirt



Figure 1

(COTS) boots available for wear; however not all meet safety requirements for use by aircrews.

Be sure the internal label states “Authorized by U.S. Army for Flight and CVC Use” and check the national stock number (NSN).

For the COTS hot weather, flame resistance boots manufactured by the Belleville Shoe Manufacturing Co., the leather backstay on the back spine of the boot is a quick identifier to tell the difference between their model 340DES boot, which is authorized for flight use, from their model 390, which is *not* authorized for flight use. See figure 3.

The model 390 ACB uses a nylon web backstay which can burn in a flame environment.

Here are some frequently asked questions about Army uniform wear. *Can you wear other commercially available boots similar to the three sets of flight boots listed above?*

No, all boots must be tested by Natick Labs for proper fire resistance characteristics before they are authorized for wear. Commercial boots are not authorized.

Must you blouse the A2CU trousers?

Army Combat Boot



Figure 2



Figure 3

The A2CU trousers are designed to be worn un-bloused around the boot while performing duties with associated flame risk or hazard. However, once complete with the mission, Soldiers are required to blouse their boots.

Is the tan T-shirt (50/50 polyester blend) that's issued during the rapid fielding initiative authorized for wear with the A2CU during operations associated with flame risk or hazard?

No, only the 100 percent cotton sage green T-shirt is authorized for wear with the A2CU.

Can the Army Combat Shirt be worn in Garrison?

No, it is only authorized to be worn when engaged in flight duties when worn with the A2CU.

Can you wear the ACS with pencils/pens in the pockets while performing aircrew member duties?

No, all writing utensils must be removed while in, around, or on aircraft. Can special skill badges be worn with the A2CU?

Yes, however, they must be removed before flight as a safety precaution.

Summary

Our Soldiers deserve the best uniforms and equipment that our nation can provide. Soldiers can now enjoy the functionality and comfort of new flight uniforms. These new uniforms are an example of the effort the Army has done in that regard.

Soldiers now have three different types of flight boots they can use in different climates, as well as the Army combat shirt that can be worn during hot weather operations.

Above the Best!



CSM Donald R. Sanders is the command sergeant major of the Aviation branch at the U.S. Army Aviation Center of Excellence, Fort Rucker, Ala. Email: donald.r.sanders@comus.army.mil.

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A Change in Thinking

By BG William H. Forrester

Editor's note: This is BG Bill Forrester's final article as the director of Army Safety. On Oct. 17 Forrester relinquished command of the U.S. Army Combat Readiness/Safety Center to BG William T. Wolf. We thank him for his many contributions to ARMY AVIATION magazine and bid him farewell and best wishes as he retires after 30 years of service.

Safety is an intangible. We can't count it to determine how much we have or how much we need. We can't issue it to Soldiers to keep them safe.

Yet every Leader in our Army is responsible for protecting Soldiers, as well as instilling in them a sense of personal responsibility for their safety. What a daunting task.

For the last two years, it has been my distinct honor and privilege to serve as the director of Army Safety and commanding general of the U.S. Army Combat Readiness/Safety Center. In my time here, I have had the opportunity to see, and participate in, the ongoing transformation of Army safety from a reactive culture to a proactive and predictive culture.

Leaders and Soldiers have changed the Army's safety culture. The greatest paradigm shift occurred due to a change in thinking – not in what Soldiers think, but in *how* they think. You have taken the way we think about safety to the next level.

So what have we, as an Army, accomplished to promote safety? We have made great strides in reaching Soldiers by targeting influencers and making them part of the safety solution. We also targeted safety messages to specific demographic groups and developed user-friendly delivery methods for ease of use.

Soldiers are Soldiers 24/7, and, beyond deployments, the bulk of their time is spent outside the oversight of leaders. Keeping Soldiers safe while off-duty is a challenge that requires out-of-the-box thinking and new approaches.

Understanding the influence of spouses and family members, we expanded our safety team to include those who support the Soldier 24/7. No one knows the habits, thought processes and reactions of a Soldier better than his family.

With the *Post-Deployment Family Engagement* and *BOSS Safety Factor* kits, the Army enlisted the support of Soldiers' loved ones. Both kits educate Soldiers and families, make them aware of potential hazards and empower them to act as a positive safety influence in their Soldier's life.

Peer influence is another powerful tool. On a one-to-one basis, the "looking out" for a battle buddy has kept many a Soldier from harm both on and off duty. Multiply this effort throughout the Army and you form a force truly comparable to a Band of Brothers.

Young Soldiers might have difficulty recognizing risky behavior among their peers until they see the negative results firsthand. The injury or death of a brother in arms is not the way we want Soldiers to learn how to conduct themselves safely.

Army safety entered a new phase by harnessing the combined wisdom from every echelon across the Army and getting that knowledge from those who have it to those who need it.

The Army Safety Net forum is one that will grow and prosper through your efforts. The sharing of best practices and lessons learned provides a repository of current, relevant safety information for its members to draw upon.

Although I am leaving the Safety Center, I look forward to seeing the continued progress and evolution of Army safety. Credit for safety successes does not go to me or the people in this building. Although we strive to provide the best information and tools, the bottom line is that Soldiers keep Soldiers safe.

I wish all of you the best and Army Safe is Army Strong!



BG William Forrester served as the director of Army Safety and the commanding general of the U.S. Army Combat Readiness/Safety Center at Fort Rucker, Ala.

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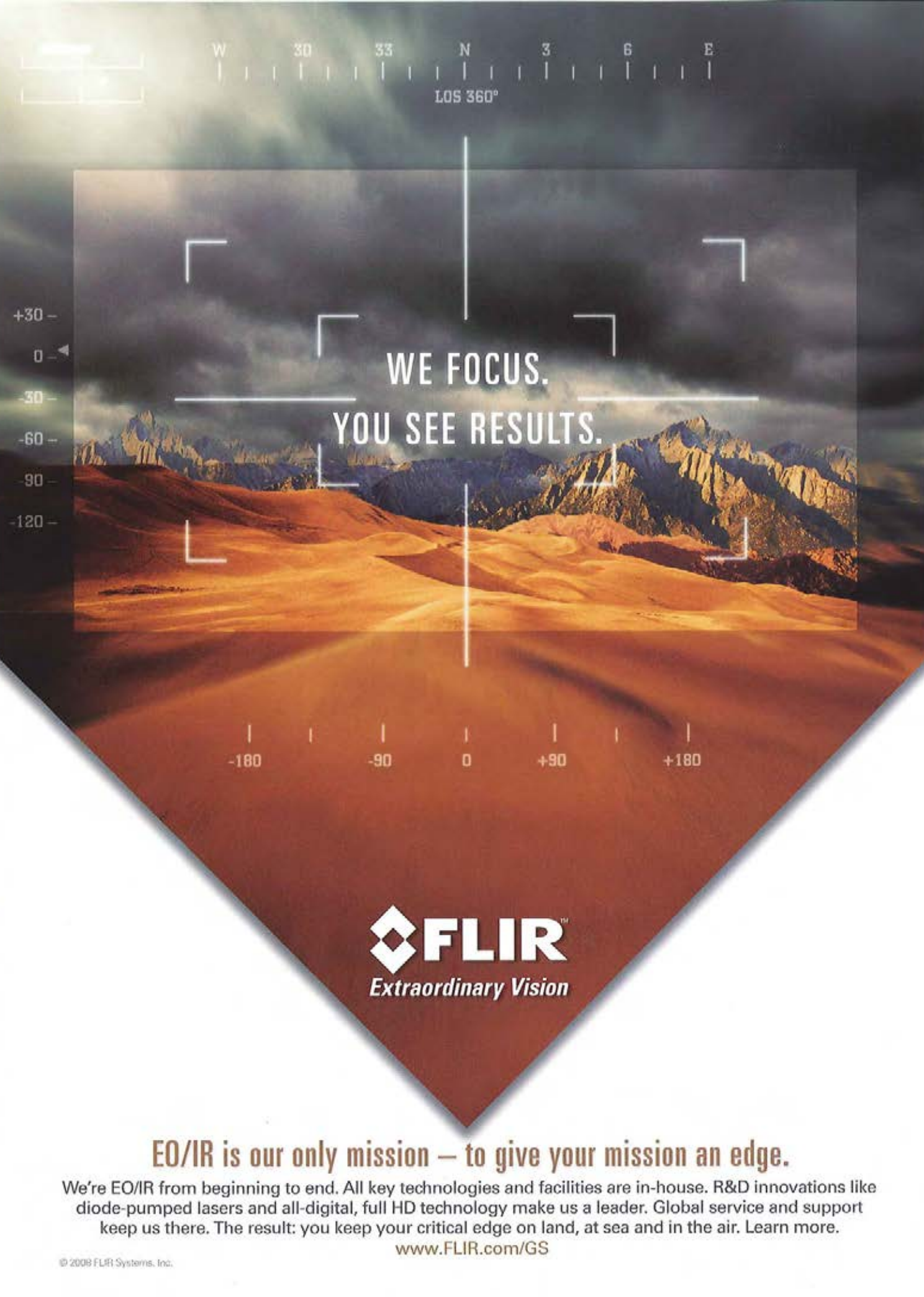
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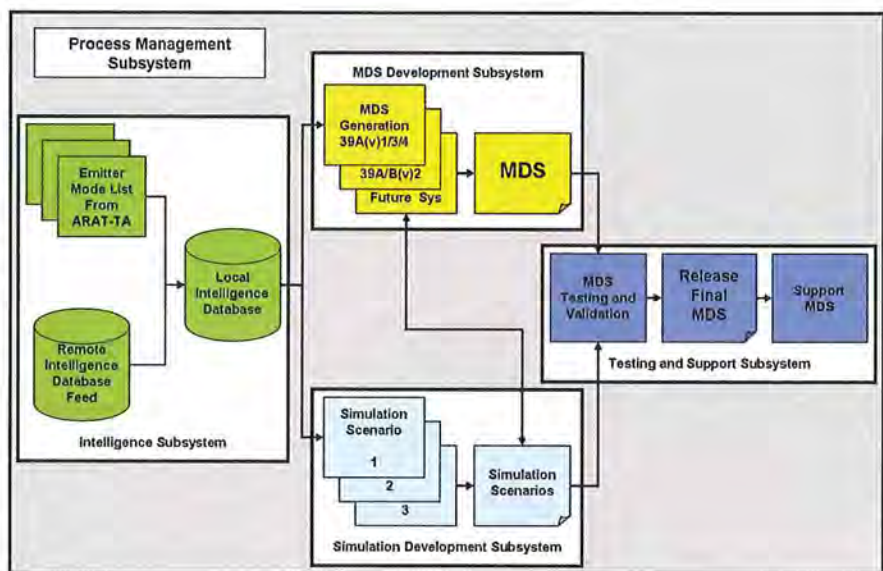
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By Michael Crapanzano



These systems include the Warlock and the Duke, the CREW (for Counter Remote controlled improvised explosive device Electronic Warfare), and various aircraft survivability equipment (ASE) systems, to include the common missile warning system (CMWS) and the AN/APR-39 family of radar warning receivers, as well as fire control radar systems such as the AN/APR-48 radar frequency interferometer system.

The ARAT process and corre-



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Figure 2: Simulation testing of mission data sets requires the use of high-fidelity radar signal simulators. Here is a test rack, controlled by the automation software, which selects the correct signal path based on test conditions for testing AN/APR-39 radar warning receivers.

to adapt to continual changes in organizational strategy and project attributes. The purpose of this initiative is to execute related projects under a program structure that better affords successful support of mission critical programmatic, operational, technical and fiscal requirements.

The effect that this model has had on a program is evident in its capability to develop processes to improve respond time to meet tactical force protection requirements.

Mission Data Sets

In an effort to better support the aviators in the field, the ARAT has been automating the system repro-

gramming process for mission data set (MDS) development in order to greatly reduce the time required to get aviators the information they need to identify threats and stay alive in combat.

Previously, it would take many months to analyze threat changes and reprogram the MDS for the APR-39 series of radar warning receivers.

Small changes to an MDS may take just a few days to implement; but complete MDS changes for a theater of operations take a great deal of time and effort.

By analyzing the timeline for MDS development, radar frequency simulation development, testing and validation, we identified the schedule drivers in the process and have been deliberately developing processes and equipment to greatly improve the operations.

The overall architecture of an integrated system to perform these functions is being developed by the ARAT-PO and is depicted in *Figure 1*.

The actual development of an MDS is very time-consuming.

The analysis of the data and the generation of the decision trees and tables to resolve signal ambiguities, coupled with the complicated conversion of the information into machine-understandable format, require a team of engineers up to nine weeks to implement.

By analyzing the information needs, the development processes and the results required, we were able to automate the complex and tedious tasks of MDS generation for the AN/APR-39A(V)1 radar warning receiver – reducing the time to actually generate the MDS from weeks to days.

The key driver in MDS generation, at this point, is the tailoring of electronic warfare data to initialize the MDS generator.

But we are attacking that problem also and by the end of this year we will have reduced the timeline further to one day for the APR-39 MDS generation – a reduction of better than 95 percent.

We are in the process of developing a similar system to reduce the time to develop an MDS for the other radio frequency (RF) detection systems from many weeks to several days.

Simulation testing an MDS requires the use of high-fidelity radar signal simulators. See *Figure 2*.

MDS Challenges

Because of the complexity of modern radars, the signal waveforms that need to be replicated must have enormous fidelity – which translates into the need for volumes of data to properly characterize and replicate a system.

Developing an MDS is complicated, but requires about one-fifth of the information needed to generate a high-fidelity replication of a RF signal.

Even though the development of an RF simulation is better defined than an MDS development, the sheer volume of data to move and manage is daunting.

Thousands of data elements reflecting electronic warfare data would have to be entered into simulation files by hand.

A series of simulations would then be assembled by hand into an MDS specific test scenario – making for long hours in front of a computer.

The first thing we did to reduce the effort required to develop a simulation was to establish a core process for development.

The base state for common systems is entered into a “golden” simulation library which can then be modified based on the theater of operation and the test points required to validate the MDS.

By having baseline simulations in place, simulation development time for an MDS test scenario was reduced from eight to about four weeks.

The next steps are to automate the data population of “golden” simulations, and then automate the MDS specific test-scenario generation.

By automatically fusing threat data, information generated by the MDS generators, and theater specific tailoring information – we anticipate being able to generate MDS and theater specific simulations in days.

These efforts are ongoing and will be in-place within the next year, as well as other organic software support capability.

Of course, feeding the above processes and systems is a large volume of threat and friendly information that has been analyzed and tailored to address specific theaters of operation.

Currently, a hard-copy threat report is delivered to the MDS development, simulation and testing team by the ARAT's Threat Analysis (TA) office



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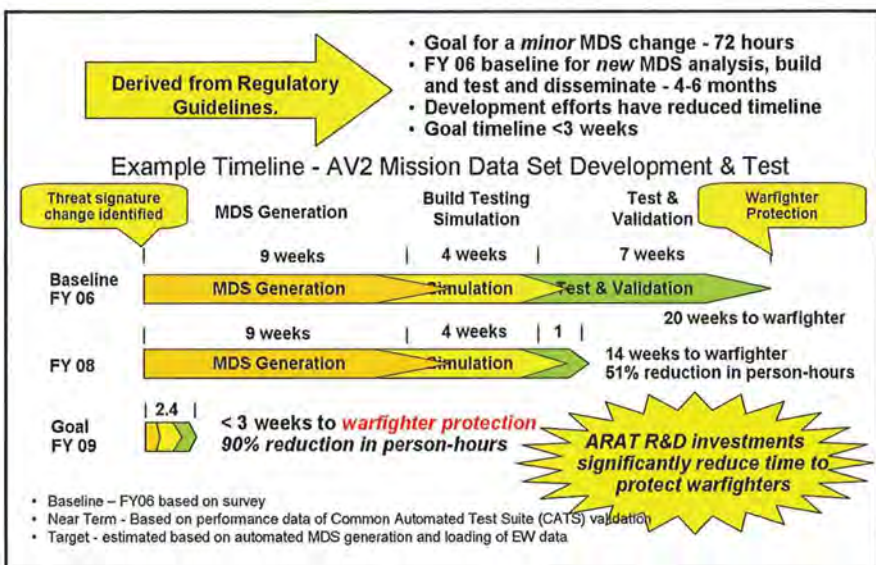


Figure 3: An example timeline for the AN/APR-39A(V)2 mission data set development and test performance.

at Eglin Air Force Base, Fla.

The information is reviewed, combined with base-line information, and then entered into the MDS generation and simulation development systems.

In parallel with the above developments and in conjunction with the ARAT-TA, we are also automating the reporting and data transfer process.

When this automation is complete, almost the entire MDS generation, simulation development, and testing and validation processes will be automated resulting in a collapse of the timeline from 20 weeks to less than three weeks with an attendant reduction in required labor by 90 percent. See Figure 3.

Summary

The ARAT process and infrastructure goals corresponded to Army transformation in creating a strategic advantage and operational posture ensuring responsive, deployable, agile, versatile, lethal, survivable and sustainable the main tenants of transformation.

This will afford the tactical commander the ability to support operational force protection requirements that are sustainable via organic Army capabilities that afford a rapid cost effective support methodology based on tactical requirements, not acquisition timelines.

This capability also includes ARAT's development of the tactical

classified infrastructure that will continue to adapt to the rapid real-time support requirement, by supplying a capability and transforms the secure internet protocol network (SIPRNet) into a force protection post-production software support infrastructure to accommodate a one-stop shop for all force protection users support requirements via the ARAT Warfighter Survivability Software Support Portal or AWSSSP.

ARAT supports over 4,700 warfighter users via the AWSSSP, directly supporting their classified data and reprogramming requirements.

With the new structure of the ARAT program, and the capabilities this structure brings to the fight both currently and into the future, will only ensure the acceleration of the transformation of organic post-production software support of force protection air and ground electronic attack, protect and support systems via its proven and adaptable process and support infrastructure to meet the real-time requirements of the warfighter customer.



Michael Crapanzano is the chief of the Army Reprogramming Analysis Team-Program Office with the Software Engineering Center, U.S. Army Communications-Electronic Life Cycle Management Command, Fort Monmouth, N.J.

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Keeping Pilots Focused on the Mission Not the Threat

By Brandon Pollachek



SPECIAL FOCUS

AIRCRAFT SURVIVABILITY EQUIPMENT

A pair of AH-64D Longbow attack helicopters dispenses flares during a mission while flying over Balad in Iraq.

ARMY PHOTO

Army aviation is predicated on close air support, short-range transportation, surveillance and search and rescue.

The term "defense" plays little part in aviation doctrine with the exception of defending ground forces.

However, it's the defensive systems located within fixed and rotary winged aircraft that allow its crews to accomplish their primary mission while operating in a combat zone.

In boxing, even the most explosive puncher has to be leery of a cunning fighter who can attack with just the right amount of finesse to render them unconscious. This is the same theory behind the threats that Army aviators are faced with in the ongoing Global War on Terrorism.

With man portable air defense systems (MANPADS) serving as a prime threat to U.S. aircraft, it is vital that the aviation community is provided with technology that will keep them one step ahead of a cunning enemy.

Since the inception of Operations Enduring and Iraqi Freedom, aircraft survivability equipment (ASE) systems have moved into the forefront for senior leaders in terms of added emphasis for upgraded systems and

new technologies.

"The focus on ASE was increased based on enemy tactics, techniques and procedures," said COL Kennedy Jenkins, program director for ASE (PD-ASE), which is a part of the Program Executive Office for Intelligence, Electronic Warfare and Sensors and based at Redstone Arsenal, Ala.

Following the loss of a CH-47 Chinook helicopter to an enemy missile in November 2003, then Acting Secretary of the Army Robert L. Brownlee called for a plan, "...to equip all our helicopters in Iraq and Afghanistan with the most effective systems we have in development or procurement."

In response to this challenge, production was immediately accelerated on the common missile warning system (CMWS) and the improved countermeasure dispenser (ICMD).

"The enemy's use of certain types of threats and capabilities necessitated the CMWS be added to the ASE suite that was then on aircraft," Jenkins said.

"The common missile warning system defeats MANPADS, as it warns the crew that a missile has been launched at their aircraft. Because of

its effectiveness, CMWS has given pilots an increased sense of security knowing they aren't going to get shot out of the sky by a MANPADS missile," Jenkins said.

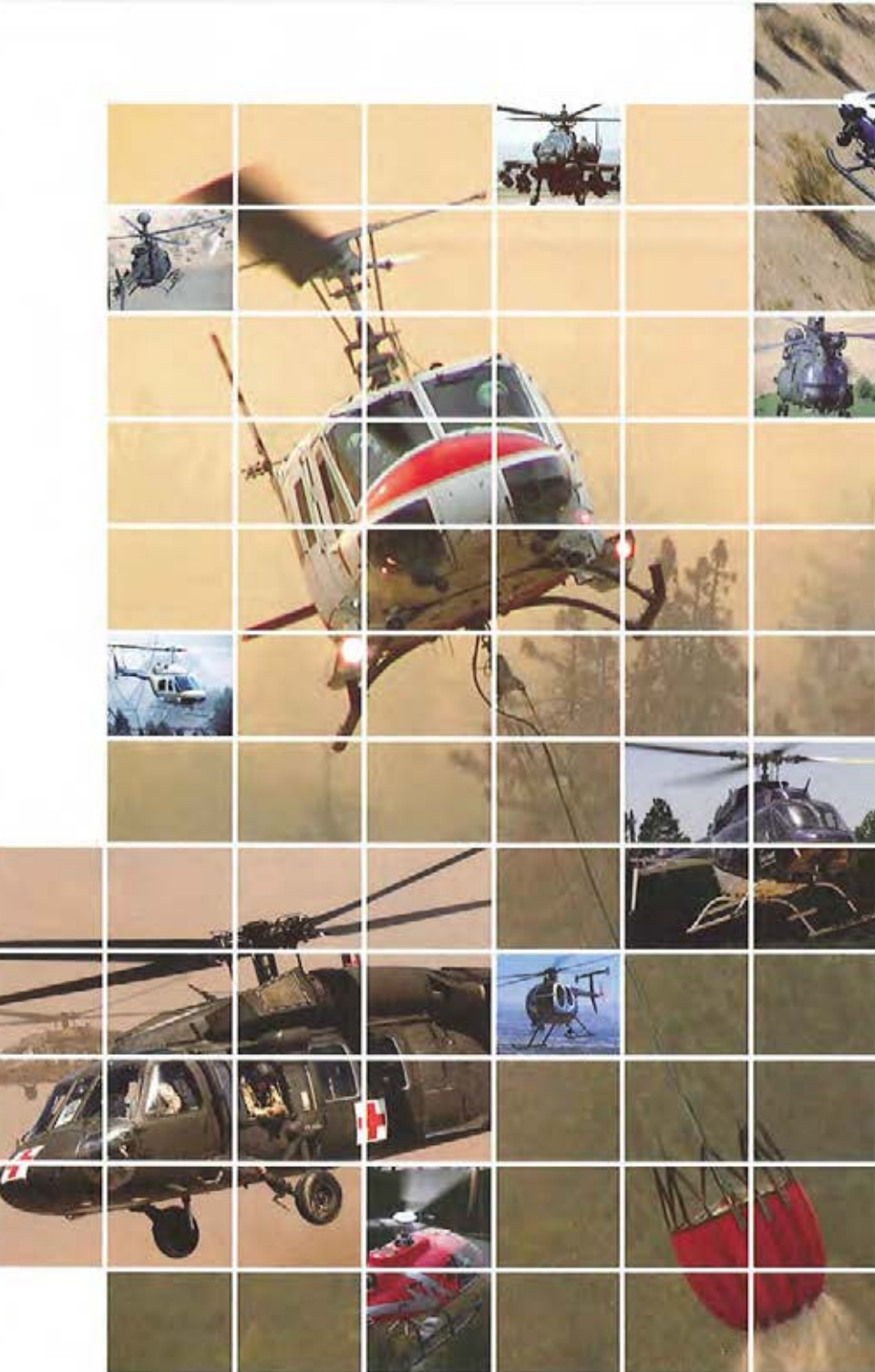
This added system not only allows for additional security, but also offers the pilot the benefit of being autonomous. Aircrews do not have to divert attention from their primary mission in order to counter a MANPADS threat.

Improving on the CMWS system is a key reason a fifth sensor was recently added. The additional sensor gives Army pilots more flexibility in their mission profiles.

Today, more than 500 aircraft are deployed in Southwest Asia with fully operational CMWS and ICMD systems, which have flown more than 551,000 hours in the combat theater.

Since the initial deployment of CMWS, the system has consistently freed pilots up from distractions caused by threats they encounter flying through potentially hostile territories.

"We have many reports of pilots having been saved by their CMWS after a missile is fired at them. CMWS detects the missile, deploys flares and pulls the missile away from



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A new UH-60M Black Hawk fires off flares during operational testing with the Army's Aviation Technical Test Center.



The program director for aircraft survivability equipment is providing the aviation warfighter with the latest upgrades and enhancements to the common missile warning system and the improved countermeasure dispenser. Here, a system test is conducted on the new CH-47F model Chinook to verify operability.

the aircraft," Jenkins said.

The benefits of the systems for aircrews that have used them in combat are evident.

"CMWS does reduce the immediate reaction workload of responding to a missile threat," said CW5 Pat Shores, Aviation Branch Tactical Operations Officer with the Directorate of Training and Doctrine, U.S. Army Aviation Center of Excellence.

"This also enables the crew to react faster to destroying the threat on the ground. I think the bad guys are finding out the hard way that shooting a missile at Army aircraft is a 'lose-lose' situation for them," said Shores, a UH-60 pilot who flew with the 4th Inf. Div. in Iraq.

"They have an extremely low probability of a hit, and due to the CMWS and similar systems, they also have a high probability of being detected and destroyed after the shot," Shores said.

Echoing Shores' thoughts is CW4 Jim Massey, a veteran AH-64 attack pilot who flew in Iraq with the 1st Cav. Div. "CMWS provides risk mitigation for the threat systems it was designed to defeat allowing aircrews to focus more intently on the mission at hand rather than solely on threat avoidance," said Massey, who is in Tactics Development with the TACOPS Branch of the Tactics Div. at DOTD.

At the top of PD-ASE's agenda is

the Advanced Threat Infrared Countermeasures (ATIRCM), an Army Acquisition Category 1 program. The ATIRCM will function with the CMWS to provide aviation assets the ability to focus on their mission while the system protects the aircraft.

Mission effectiveness will be enhanced due to the combination of alert and defeat functions of the system, which necessitate little to no deviation or needed action by pilots.

The ATIRCM consists of a laser that will direct energy on a missile and force it to break away from an aircraft.

"They are an integrated system and it has always been the intent to field those two together. The CMWS is the eyes of the system and the ATIRCM is the sword, or active countermeasure of the system," Jenkins said.

PD-ASE is also offering added security to pilots through the rejuvenation of legacy systems.

The APR-39 radar warning receiver has been on board aircraft since the early 1990s.

"For what it was capable of during the time it was fielded, it was the most modern radio frequency [warning system] in the inventory," Jenkins said, "This upgrade will take into account variables like the types of threat present and where you are flying, so that you will be able to make changes to the system accordingly."

Part of the PD-ASE future plans include addressing size, weight and power issues, which naturally arise any time a new piece of equipment is

added to Army aircraft.

PD-ASE is moving toward an integrated ASE suite that will be able to defeat all threats – regardless of airframe or mission.

According to Jenkins, the integrated ASE system will "fuse the functions of all onboard sensors and provide the input to a 'brain' or ASE controller – based on the type of threat, the appropriate ASE system is then activated."

Current ASE systems are federated and have their own dedicated display and warning.

The intended purpose of the integrated ASE is that there will be just one system for the users to operate. The pilot flying an aircraft will hear the same voice or only has to look at one display to get all ASE information.

Jenkins stated, "Protecting the people that protect the nation" is the purpose of ASE.

As the future integrated ASE becomes reality for Army aviation, it will continue to focus on warfighter survivability while allowing them to concentrate on their primary mission.

Smaller and lighter interdependent systems will increase load levels and allow the focus to remain on the Soldiers.

It is the Soldier that wins battles, not ASE.



Brandon Pollachek is the public affairs officer for the Program Executive Office for Intelligence, Electronic Warfare & Sensors, Fort Monmouth, N.J.

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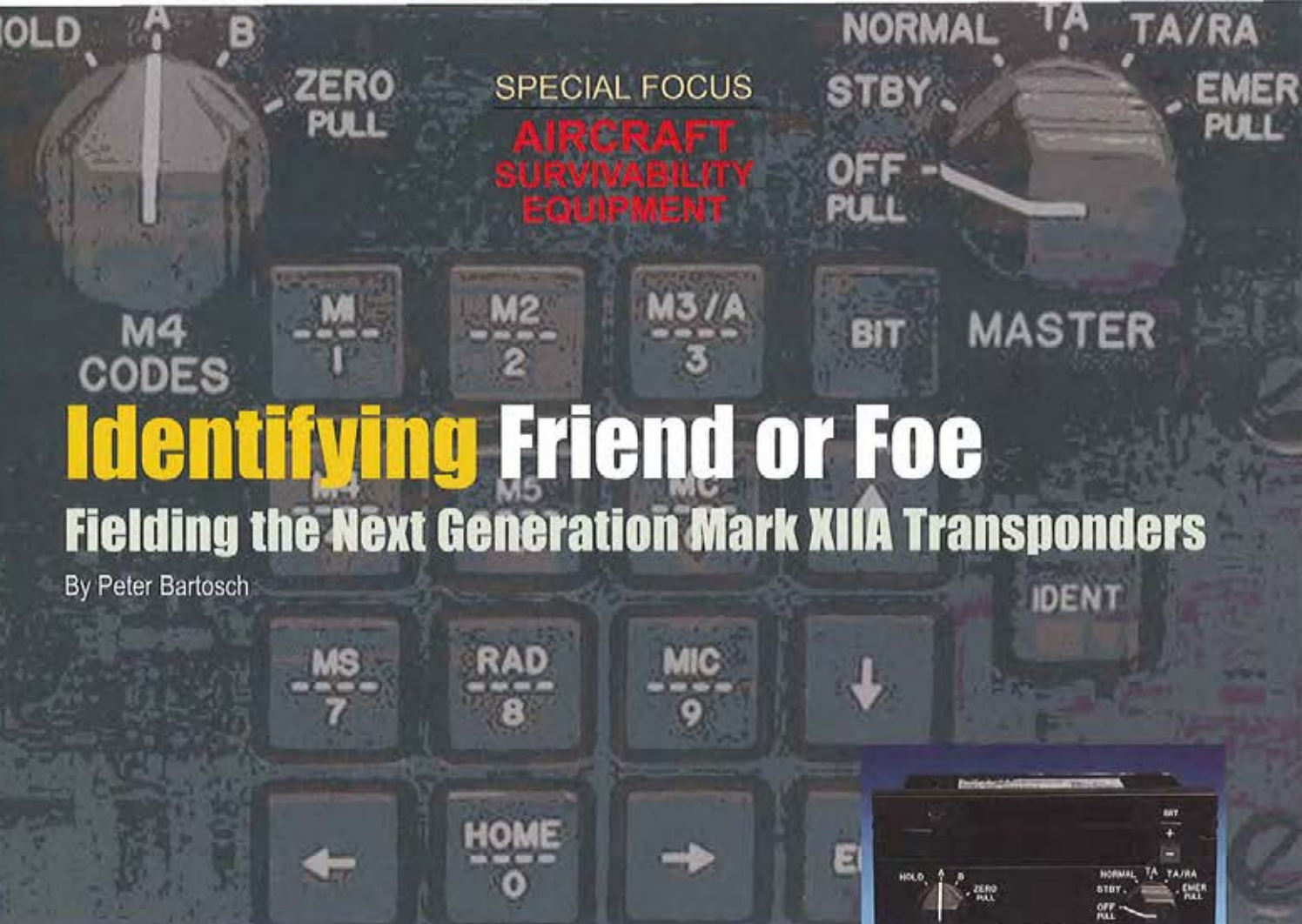
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Identifying Friend or Foe

Fielding the Next Generation Mark XIIA Transponders

By Peter Bartosch

In the next few years, the Defense Department will begin fielding new *identification friend or foe* (IFF) transponder equipment in Army fixed- and rotary-wing aircraft, and in selected unmanned aircraft systems.

The next generation Mark XIIA transponder will enable the new IFF military mode, more commonly known as "Mode 5."

It has been over 50 years since the North Atlantic Treaty Organization (NATO) initially fielded the first IFF, the Mark X, and soon thereafter Mark XII (Mode 4) interrogator and transponder system.

Limitations of IFF

IFF is a misnomer. Air defense and air traffic control radar IFF interrogators can identify targets as friendly, but all the other targets are classified as unknown.

Since the friendly shoot-down incident of two Army UH-60 Black Hawk helicopters on April 14, 1994 during Operation Provide Comfort in northern Iraq, IFF systems have received a

lot of attention from DOD and NATO authorities, and the Army has worked steadily to improve its IFF performance.

Still there are issues with Mode 4, which include:

- The Federal Aviation Administration (FAA) does not allow the use of Mode 4 in civilian airspace.
- The National Security Agency (NSA) has de-certified the Mode 4 cryptology.
- Only two time periods of key materiel can be loaded at one time.

A Joint Chiefs of Staff study between 1995 through 1998 concluded that IFF systems are needed into the future for immediate combat identification. All the other data distribution systems are too slow or unreliable for safety-of-life in air defense engagements.

In 1998, the NATO decided to replace Mode 4 with a Mode 5.

In the U.S., the chairman of Joint Chiefs of Staff gave the Navy the task to develop a requirement document for Mode 5.



The AN/APX-118 transponder, here with the control head, offers Mode 1, 2, 3/A, C, 4 and S, and will be installed in Army helicopters.

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The Army's fixed wing fleet will be fielded with the AN/APX-119 transponder, also with Modes 1, 2, 3A, C, 4 and S.

The requirements were approved in 1999 and include:

- ▶ Not to interfere with civil air traffic control.
- ▶ Provide NSA certified crypto security in both interrogation and reply.
- ▶ Allow position information and unique addresses for aircraft location and identification.
- ▶ Allow response to interrogation when aircraft are in a "stealth" or emission control mode.

Army Fielding

The Army is poised to implement Mode 5. However, it will take 10 to 15 years for DOD and NATO to purge Mode 4 from their fleets, so the Army will operate a combined Mode 4 and 5 for many years.

The Army's air defense and air traffic control systems are retrofitting with AN/TPX-57 interrogators that will simultaneously interrogate both Mode 4 and Mode 5.

The three transponders the Army is procuring are the AN/APX-118, AN/APX-119 and the AN/APX-123.

Army helicopters and unmanned aircraft systems (UAS) are currently receiving the AN/APX-118. This transponder has embedded Mode 4 cryptography and therefore does away with the KIT-1C computer.

The Army will upgrade the AN/APX-118 with Mode 5 capability to become the AN/APX-123, and procure new APX-123 for new aircraft coming off the production line.

Army fixed-wing aircraft will receive the APX-119 with the KIV-77 Mode 4 only appliqué, but this



The KIV-77 is the Mode 4 and 5 appliqué for the AN/APX-119 used with fixed wing aircraft.

transponder is Mode 5 capable.

Changing the KIV-119 crypto module to a KIV-77 module enables Mode 5.

Several important enablers for successful Mode 5 fielding are the IFF test set and the AN/PYQ-10C Simple Key Loader (SKL).

Procurement contracts of the Mode 5 capable test sets are lagging behind.

The Office of the Secretary of Defense is not going to rescind any time soon its mandate for 100 percent key and flight line checks of transponders before aircraft launch.

Army aviation is not going to install Mode 5 capable transponders until the TS-4530 test sets can be fielded with them.

How Does Mode 5 Affect Operations?

Mode 5 uses a different waveform than Mode 4 which allows simultaneous use of other modes without interference.

Coordinated Universal Time or UTC is used globally for Mode 5 and Army aircraft transponders are connected to onboard GPS systems (global positioning satellites) for time.

The Mode 5 transponder can be load with up to 31 time periods of



The Army's air defense and air traffic control radar systems are being fielded with the AN/TPX-57 interrogators, here with the KIV-77, to simultaneously interrogate both Modes 4 and 5.

traffic encryption key (TEK), 31 Mode 4 keys, and 31 Mode 5 keys.

The Mode 4 and 5 key is automatically changed at each crypto period, eliminating the need for the A/B period switch.

Together with the 31-day TEK, two additional keys must be loaded using the SKL into the interrogator or transponder: a key encryption key (KEK) and an algorithm encryption key (AEK).

Mode 5 replies include the selective identification feature (SIF) modes of 1-aircraft identification and national origin code, 2-special codes including: "emergency," an identification (ident) pulse (I/P), and the UAS code, 3 and C for position and altitude.

The Mode 5 position reporting feature is sometimes referred to as Mode 5-Level 2 capability.

The Mode 5 has a "squitter" function which operates much like an automatic dependency surveillance-broadcast (ADS-B); with the exception that the Mode 5 squitter is cryptographically secured.

Mode 5 also has what is known as a "lethal interrogation" mode and in this mode, Army aircraft can turn the transponder to the STBY (standby) position and still be protected from friendly air defense fire systems.

Mode 5 has a random reply rate

which means that aircraft in tight formation can all squawk on Mode 5 and air traffic control or air defense will be able to distinguish each and every one.

The APX-118, APX-119 and APX-123 all have the legacy selective identification feature (SIF) and Mode S capability.

The squitter function offers the possibility of air defense and air traffic control systems to never have to interrogate with secondary radar.

The NSA has determined that Mode 5 crypto is so tamper resistant that once installed the crew will never have to "zeroize" the equipment, as the KEK and AEK are automatically zeroized if the transponder is removed or otherwise tampered with.

This means Mode 5 crypto equipment is unclassified when keyed.

Some of the drawbacks to mode 5 are:

- ▶ It requires an internal battery or platform power to sustain the key.
- ▶ One of these keys, called the Quadrant Encryption Key, is critical

and can only be restored at depot level.

▶ Mode 5 key cannot be loaded with the KOI-18, KYK-13 or KYK-15 equipment.

▶ Users must use a CYZ-10 or PYQ-10 data transfer device with Common Tier 3 software.

▶ The APX-118, APX-119 and APX-123 do not have full ADS-B "out" capability, required by the FAA by 2020.

Conclusion

The Mode 5 is a big improvement in terms of security, functionality and non-interference with air traffic control.

The fielding of Mode 5 systems will get underway once the Army works out the test set issue.

The Secretary of Defense has established an initial operational capabilities date of fiscal year 2014 and a full operational capabilities date of FY 2020.

End Note:

There is a Mark XIIIA Joint Concept of Employment for Mode 5

publication available to units.

The JCONEMP is for official use only and will eventually become a joint publication much like an Army field manual, but for now it is used by concepts and requirements personnel and commanders in the field as feeder information for the development of their tactics, techniques and procedures.

The Pentagon has also published technical publications: DOD AIMS 04-900 and DOD AIMS 03-1000A with more information. Units in the field may obtain a copy of these pubs to begin development of their own TTP and provide feedback for the development of field manuals.



Retired MAJ Peter Bartosch is a contractor who develops and documents aviation avionics capability requirements for the Directorate of Concepts and Requirements, U.S. Army Aviation Center of Excellence, Fort Rucker, Ala.



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A member of the first Aircraft Shoot Down Assessment Team inspects the damage to a civilian fixed wing aircraft hit over Baghdad by an enemy weapons system in 2003 in Iraq.

Combat forensics for the warfighter is not simply data collection. Since its formation in 2003, the Aircraft Shoot-Down Assessment Team from the U.S. Army Aviation Center of Excellence has assessed numerous incidents of aircraft damage and loss, providing specific information on those events back to the aviation force.

Shot-hit data is vitally important to tactical operators, and it is what the Aircraft Shoot-Down Assessment Team (ASDAT) built its reputation on. But it is only one part of the story.

The information developed by the ASDAT is used by the intelligence, acquisition, and the test communities throughout the Defense Department and other government agencies.

Within our aviation forces, it provides essential data on how enemy and friendly forces function, leading to the development of tactics, counter-tactics and doctrine.

Disseminating aviation combat forensic data across the boundaries of disparate, but collaborative communities, is vital to improving the survivability of our aviation Soldiers and platforms.

Collecting this data is important, but communicating this relevant and timely information is the core value of the ASDAT mission.

ASDAT Evolution

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

Our most important customer was then, and remains, tactical units.

The team was on the cutting edge of combat data collection, but the mission focused on events that had already occurred.

It was comparable to driving down the interstate looking in the rear-view mirror. That information is important, but correlating that data for use in future operations is what commanders and aircrew really needed.

The requirements for ASDAT-derived information then became twofold: primarily to develop information a deployed unit could use the very next day, while at the same time providing tailored, pertinent information to units before they deployed.

While the ASDAT continued to respond to the daily needs and requests of our deployed aviators, the challenge became taking the information collected in combat and getting it to individuals and units in training.

The information was also needed in professional military education courses here at Fort Rucker, at aviation unit home stations, and at the combat training centers and the reserve component training sites, where commanders and aviators had the time to incorporate

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Enhancing Survivability Translating Combat Damage Data into Lessons Learned

By CW5 (Ret.) Gregory Fuchs



ARMY PHOTO

Members of the Aircraft Shoot Down Assessment Team, including the author Gregory Fuchs in center, prepare to accompany a downed aircraft recovery team on a mission in 2007.

that information into tactical planning and development.

To accomplish this, the ASDAT relocated from the 1st Avn. Bde. to the newly formed Tactics Division within the Directorate of Training and Doctrine. This nested the team with the Tactical Operations Branch, the Lessons Learned Integration (L2I) team, and with the tactics, techniques and procedure developers.

The transition from an ad hoc team to an organization with an Army Headquarters approved personnel slate – comprised of six senior war-rant officers (aviation combat foren-

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Several ASDAT members, accompanied by a security detachment, conduct a sensitive site exploitation patrol during an investigation in Iraq.

sics officers or ACFO) and two Department of the Army civilians – solidified the ASDAT as a permanent resource within the Aviation Branch.

Finding Solutions

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

To do this, they must have a complete understanding of the threat systems used by an evolving enemy and the enemy itself, and of the aircraft and aircraft survivability systems.

As aviators and tactical operations officers with at least battalion level combat experience, the ACFOs have a substantial base of Army aviation knowledge.

Additionally, they receive advanced survivability, assessment and intelligence training prior to assignment to the team. This training provides team members a solid foundation in these fields, enabling them to work closely with relevant intelligence organizations and the test and acquisition communities.

Collaboration with the intelligence centers quickly becomes second nature to team members and provides valuable information that the ACFOs are then able to pass on to units both overseas and stateside.

Having team members from acquisition and testing organizations on the original 2003 ASDAT taught us the value of close cooperation with survivability system developers.

Working in concert with Fort Rucker's Concepts and Requirements Directorate, the team has had the opportunity to provide recommendations for numerous material solutions – from infrared strobes that mitigate the risk of night multi-ship operations over urban terrain, to modifications of aircraft survivability system hardware and software.

Training

As a part of the Tactics Division, the ASDAT observations, insights and lessons learned are now inserted in many of the professional military education programs at Fort Rucker.

From the Division Commander's Course, to the Aviation Warrant Officer Advanced Course, along with tailored programs for the Tactical Operations Officer Course and the Aviation Survival, Evasion, Resistance and Escape (SERE) Course, information from combat assessments is imbedded in and relevant to the individual aviation training programs.

In order to optimize Army aviation knowledge management, the next step was to address unit training during pre-deployment.

A robust schedule of unit assistance visits and participation in the Directorate of Simulation's aviation training exercise program ensures that ASDAT information reaches all deploying units.

This multi-faceted approach guarantees that the most relevant and timely information is provided to individuals and units during all phases of their deployment cycle, as well

as to the institutional training communities that support them.

The team also works closely with the Tactical Operations Branch and the Lessons Learned Integration Cell of the Tactics Division for the collection, analysis, and dissemination of tactics, techniques and procedures, of aircraft survivability equipment training strategies, and the lessons learned to our aviation force.

Summary

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

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

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

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

Validation of the Aircraft Shoot-Down Assessment Team's mission, expertise and products lies in the continued mission success of Army aviation units and progressive improvement of the tactical and material solutions which increase crew and platform survivability.

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SPECIAL FOCUS SAFETY

USACRC recently established a Human Factors Task Force to research and engage the human factors aspect of accident prevention; their focus is on cultural change and to develop resources and provide solutions for preventing loss at the Army level. Here, 2LT Zack Zilai with the 172nd Stryker Bde, Cbt. Tm. coordinates aerial coverage with an AH-64D attack helicopter while conducting a June 2006 mission near Tall Afar, Iraq.

Aviation Combat Readiness and Safety Engaging the Human Dimension

By LTC Scott Kubica

Armey aviation has had one of the safest years in recent history. Class A accidents are down 20 percent, Class B are up 12 percent, and Class C are down 13 percent; however, the most significant reduction has been the 82 percent drop in aviation fatalities when compared to fiscal year 2007.

This is because of many factors; however, the most influential piece is the leader engagement we see across the aviation ranks.

Senior leaders are involved in mission planning and incorporating composite risk management in each process. Their experienced oversight has resulted in this positive reduction in aviation accidents.

So how do we continue to set our sights on lowering the number of fatalities? We do this by attacking the human dimension piece of the puzzle.

Army aviation capabilities have been recognized and eagerly sought after by the ground commander as a

proven combat multiplier for the combined arms team.

Our aircrews have flown over one million hours this year. Most of our efforts support the Global War on Terrorism (GWOT) throughout the world and assist in deterring aggression on the Korean peninsula.

The success of ground commanders is dependent upon Army aviation. Army aircrews provide a myriad of mission support worldwide, from responsive fires by our attack teams in Iraq and Afghanistan and timely special operations aviation missions around the globe; to supply delivery, MEDEVAC and air assaults by our cargo and utility platforms.

With "eyes out front," whether it's our air cavalry, fixed wing or unmanned aerial systems, Army aviation impressively contributes to every operation!

Manned Accident Data

Since the beginning of the GWOT, the Army has lost 173 lives and 128

aircraft due to accidents.

Roughly 80 percent of those aircraft accidents were a result of human error, with 56 percent attributed to poor crew coordination.

In fiscal 2007, 72 percent of the accidents attributed to human error.

Currently in fiscal year 2008, 83 percent of aviation accidents are attributed to human error, which is an 11 percent increase from last year.

So the question is, why the increase this year? We have looked at many accidents and their cause factors, and the ones that are recurring are:

- Poor crew coordination - 56 percent
- Individual failure - 45 percent
- Standards failures or indiscipline - 28 percent
- Leadership failure - 7 percent

To avoid confusion, there can be more than one causal factor in an accident; therefore, the percentages won't add up to 100 percent.

After in-depth analysis, one thing remains constant—Army aviation

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The Army is acquiring new aircraft like the CH-47F Chinook, equipped with the common avionics architecture system cockpit, which provides greater situational awareness, navigational abilities, terrain and threat avoidance. Because of new aircraft capabilities, the potential for human error is ever present and leaders and pilots will need to be vigilant to complacency and over confidants.

accident trends derive from human error failures in one aspect or another.

Unmanned Accident Data Facts

We recently concluded an analysis of Operation Enduring Freedom and Operation Iraqi Freedom Class A

through C accident data on unmanned aircraft systems (UAS) from fiscal 2004 through fiscal 2008.

Our research revealed as the in-theater flying hours continued to increase each fiscal year, the number of accidents continued to decrease.



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This indicates a performance improvement over time in standards, training and materiel design.

We found three factors contributed to these accidents: environmental, human and materiel failures.

Environmental caused 10 percent of the accidents, while human error caused 24 percent and materiel caused 45 percent; the remaining 19 percent could not be determined.

At the time of these UAS accidents, the three leading causes were predominantly: engine failure (primarily materiel related), loss of communications link (primarily environmentally related) and collision with ground or water (primarily human factor related).

The Program Manager-UAS is currently working the materiel and environmental piece with manufacturers to make the necessary improvements.

Trends – To Err Is Human

While human error historically has been the major cause of Army aviation accidents, engaged leaders make a positive influence on mission results.

Brigade and battalion commanders who participate in mission preparation and demonstrate direct communication and interest in their aviation operations, repeatedly lower accident rates according to trend results from the Army Readiness Assessment Program (ARAP).

We have identified four common accident trends in Army aviation operations, including human error, leading to human error failures.

They are assumption of low risk, aircrew coordination failures, inadequate mission planning, and overconfidence and complacency.

Of these trends, we are finding that the "assumption of low risk" mission accidents, not the ones determined to be high risk, are contributing to mishaps.

For instance, 52 percent of accidents occur during the day and 48 percent take place during training.

Leaders should take a discriminating look at these low-risk mission accidents to ensure they have, in fact, been mitigated to the lowest risk possible.

Aircrew proficiency in the mission tasks to be performed and mastery of tactics, techniques and procedures (TTP) must be considered when assigning aircrews.

Crew coordination failures accounted for over half of the accidents in fiscal 2008.

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The U.S. Army Combat Readiness/Safety Center provides numerous risk management tools for aviation leaders to help aviation commanders and leaders preserve Soldiers and the equipment they operate.

Communication is key. Aircrews *must* communicate effectively at all times, especially in emergency situations.

They also must conduct their crew duties in accordance with the crew brief and unit standing operating procedures. This also pertains to pre-flight inspections of the aircraft.

In addition, units must ensure they conduct Aircrew Coordination Training-Enhanced (ACT-E) annually and, when available, use their aircraft simulator for crew coordination training.

Inadequate mission planning is a trend that requires briefers and approval authorities to ensure updated weather and the performance planning card (PPC) are current for the mission profile.

If the weather changes or the PPC indicates a slim power margin, leaders should change aircrews in order to put a more experienced crew on the mission.

Select competent aviators who are experienced in instrument flight tasks and feel comfortable in executing the proper instrument recovery procedures should the crew inadvertently encounter instrument meteorological conditions.

The last trend is incidents of overconfidence and/or complacency, which sometimes factor into mishaps.

One could say overconfidence breeds indiscipline; in fact, 27 percent of accidents in fiscal 2006 through 2008 were related to standardization issues.

For example, aircrews were not using operator checklists, performing preflight inspection walk-arounds or performing required tasks contrary to the aircrew training manual task standard and description.

Leaders must pay attention to stan-

dardization and discipline issues and take appropriate action immediately when encountered. Failure to do so could breed indiscipline throughout the unit, creating a higher risk for an accident.

The UAS aspect of human error is specifically related to standards and training. Since the Aviation Branch accepted the UAS program as one of its own, we have seen a significant decrease in human error accidents due to more emphasis on a standardized training program.

That said, however, the findings indicate 24 percent of UAS accidents were attributed to human error and the majority of those were caused by individual failures due to overconfidence and indiscipline. This means the individual knew the standard, yet elected not to follow the standard.

Tools to Aid in Accident Prevention

The U.S. Army Combat Readiness/Safety Center (USACRC) remains dedicated to helping aviation commanders in the field preserve our most precious assets, Soldiers and the equipment they operate.

USACRC provides numerous risk management tools for aviation leaders to use in accident prevention.

We actively seek to arm our aviation commanders with information and tools geared toward preventing aviation mishaps, reducing losses and sustaining readiness.

Aviation Training Exercise

We provide aviation training exercise pre- and post-deployment safety briefs for units preparing for and returning from deployments.

These briefs highlight current trends and provide recommendations and best practices to mitigate risk.

Aircrew Coordination Training-Enhanced

ACT-E training is a crew coordination tool developed by Fort Rucker's Directorate of Training and Doctrine and the Directorate of Evaluation and Standardization, with videos and accident data provided by USACRC.

This tool is available through the Army Knowledge Online Blackboard.

Aviation Safety E-mails

The USACRC's Air Task Force distributes aviation safety e-mails monthly to battalion commanders, informing them of recent accidents and any trends associated with them so they can look within their units, assess the hazards and mitigate the risk as needed.

Commander's Aviation Risk Tool

CART is an automated risk assessment program that is under development. This tool uses data from the Centralized Automated Flight Records System (CAFRS), the Risk Management Information System and is located within the Aviation Mission Planning System to provide aircrews the ability to complete an automated risk assessment worksheet (RAW).

Commanders can digitally view these unit-tailored RAWs to ensure risk has been mitigated to the appropriate level. CART is scheduled for fielding in 2010.

Army Readiness Assessment Program

ARAP participation has been mandated by the Army Chief of Staff for all battalions. It is a widely accepted tool for commanders, allowing them to gain valuable and useful information about their formations and what additional resources they may require.

The ARAP assessment is taken

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As the in-theater flying hours continue to increase with unmanned aircraft systems, the number of accidents continues to decrease, indicating a performance improvement over time in standards, training and materiel design – all helping to reduce the potential for mishaps.

online and provides battalion-level commanders a current snapshot of their command safety climate and culture. Its intent is to provide commanders key indicators of potential mishaps in their organizations so they can focus on resources to alleviate the hazard.

Risk Management Information System

RMIS is a historical online database of mishap information.

It can be used to gather accident information, gain lessons learned and enlighten aviation units on the risk management process.

Training Courses

USACRC provides resident training courses for aviation safety professionals, Career Program-12 careerists, centralized accident investigations and for accident board presidents.

Centralized Accident Investigations

For the majority of the Class A aviation accidents, USACRC conducts CAIs while assisting commanders with installation-level accident investigations.

Throughout the investigation process, USACRC collects the findings and

serves as the principal authority for mishap reports, collection and notifications.

An initial accident summary is available in RMIS a couple of days after a Class A accident occurs as a place holder for the in-depth CAI analysis that is available 6 to 8 weeks after the accident team returns.

Other Tools

Since our biggest killer is off-duty privately owned vehicles and privately owned motorcycles, USACRC has developed numerous tools to assist leaders with mitigating the risk and identifying high-risk Soldiers.

These include the Travel Risk Planning System (TRiPS) individual risk assessment, the Motorcycle Mentorship Program and Motorcycle Safety Foundation Motorcycle course.

Numerous other tools and products designed to help prevent the loss of personnel and equipment – such as: “Got Risk,” the Preliminary Loss Report (PLR) and the Ground Risk Assessment Tool (GRAT) – are available online, and new tools are being planned for future development. These tools are available on the USACRC homepage at <https://crc.army.mil>.

Focusing on the Human Dimension

USACRC has recently established a Human Factors Task Force committed to researching and engaging the human factors aspect of accident prevention.

The goal is to focus on cultural change and to develop resources and provide solutions for preventing loss at the Army level.

We are here to supply aviation leaders and their Soldiers the tools necessary to assist them in preventing loss by informing Army leaders, at all levels, of aviation accident trends.

We are committed to developing resources and providing solutions for preventing loss.

As we begin to acquire the likes of the AH-64D, UH-60M, CH-47F and the UH-72A equipped with the common avionics architecture system cockpits, these combat aircraft are being technologically upgraded to improve situational awareness, navigational abilities, terrain and threat avoidance.

Because there is a pilot at the controls, the capability for human error is ever present. It is easier to get complacent and overconfident because of these new aircraft capabilities.

While we have taken some of the workload off the pilot, we must take all measures to prevent complacency and overconfidence in the pilots who fly these new aircraft and the leaders who brief and approve missions.

The GWOT is not going away any time soon, and the optempo remains high. Our Army aviators are dedicated to mission accomplishment and will continue to forge on.

However, we are only human and can only be pushed so far before fatigue and poor judgment sets in. Leaders must remain vigilant and engaged to stop preventable accidents.

The USACRC will continue to identify Army aviation accident trends and other pertinent issues, and we will continue to work with aviation units and other levels of Army organizations to provide solutions for saving our aviation assets—aircrews, Soldiers and equipment.



LTC Scott Kubica is the director of the Air Task Force with the U.S. Army Combat Readiness/Safety Center;



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Home Station Gunnery Facilities

Applying a Team Effort to Overcome Challenges

By COL Richard Knapp,
CW4 Vance Paul
and CW5 (Ret.) Ron Moring



AAPI PHOTO BY JAMES SULLINGER

Within days of Operation Anaconda in March 2002 in Afghanistan, efforts began to change aviation gunnery doctrine that produced the June 2003 version of the gunnery manual.

Operations in Iraq and Afghanistan continued to dictate additional changes to how Army aviation crews prepare for war.

Ground-centric range facilities that adequately supported our Cold War Army and aviation doctrine did not provide viable training venues to support high energy tactics, especially against a fleeting enemy in complex urban terrain.

The legacy Aerial Weapon Scoring System, or AWSS, had challenges scoring diving fire rockets at close range and the response time for scoring output was slow.

Combat aviation brigade (CAB) commanders were forced to seek alternate venues or coordinate with home station range managers to construct or fabricate rudimentary infrastructures. See Figure 1.

Existing targetry components are also challenged to meet new training requirements. One-dimensional targets do not present a high-fidelity image for "shoot-don't shoot" decisions.

Additionally, one-dimensional targets do not present an optimum image for diving fire or unmanned aircraft system (UAS) sensor training.

Target berms that successfully supported hover fire have been substantially damaged during diving rocket fire.

This frequently results in the use of hulk targets in the impact area as an alternative which are not easily acces-

sible for the application of adequate forward looking infrared (FLIR) signature (i.e., reverse polarity paper or charcoal) and cannot be objectively scored. See Figure 2.

Teamed Effort

Beginning in March 2005, the Gunnery Branch of the U.S. Army Aviation Warfighting Center teamed with the Army's Sustainable Range Program (SRP) agent – the Training and Doctrine Command Capability Manager for Live Training (TCM-LT) – to address home station challenges.

The Gunnery Branch and TCM-LT set out to develop and codify aviation and AG-I home station training facility requirements for the contemporary operating environment and for "country next."

The required facility infrastructure, targetry, scoring and after-action-review requirements were analyzed and the 1999 *Digital Multi-Purpose Range Complex* (DMPRC) operational requirements document (ORD) was examined, and the existing range designs were reviewed and discrepancies were identified.

The result was the *Digital Air Ground Integration Range*, or DAGIR, and in November 2005 a finalized DAGIR white paper was developed as the aviation proponent solution to meet live-fire training requirements. See Figure 3.

Over the next two and a half years, the DAGIR white paper was successfully used to articulate requirements to the sustainable range program community, to include the Corps of Engineers;

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Figure 1

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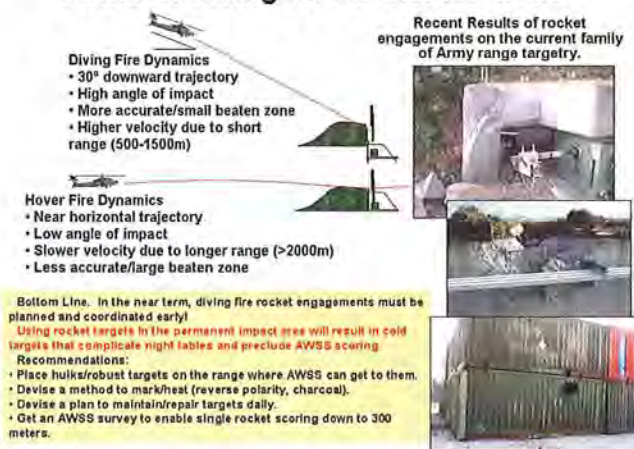


Figure 2

the Program Executive Office for Simulation, Training and Instrumentation (PEO-STRI); major Army commands, and the installation range managers.

Key SRP community leaders were informed that the 1999 DMPRC ORD aerial platform requirements were not incorporated and existing range designs lacked core aviation infrastructure (i.e., forward arming and refuel points, aerial firing points, control towers and door-gunnery accommodations).

The SRP community listened and several DAGIRs were programmed across the Army with forts Bliss, Campbell, Hood and Knox scheduled to receive them. The Army's Forces Command also requested an additional DAGIR for Fort Stewart. Germany requested the conversion of a large project to a DAGIR. The DAGIR supports installations which house medium and heavy CABs.

Installations that house light CABs or unit slices will be accommodated by aviation add-on packages. These packages were developed for application to existing digital facilities.

The Path

Concepts were developed to ensure the affordability of an aviation solution. The resultant path leveraged fielded systems in order to achieve cost avoidance.

The Aviation Tactical Engagement Simulation System (AV-TESS) smart on-board data interface module (SMODIM) was chosen as the player unit.

PEO-STRI began developing plans to incorporate the SMODIMs output into the *Digital Range Training System* (DRTS) in order to provide after-action-review (AAR) products for aerial platforms.

The shortcomings of the aerial weapon scoring system, specifically addressed in an operational needs statement, were briefed and validated at the August 2006 Army Requirements Review Board.

Six new systems were provided that, while not perfect, offer substantial improvements over legacy systems.

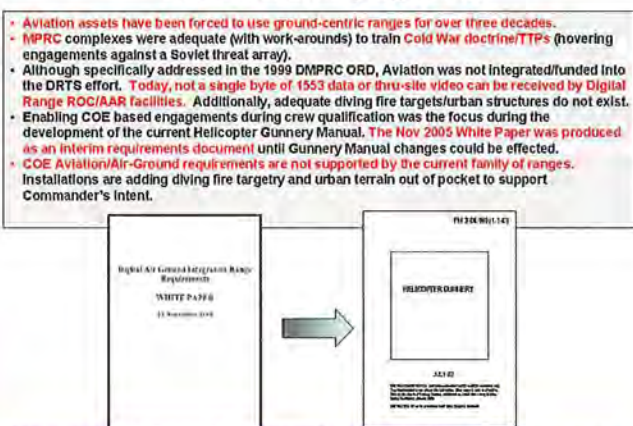
These systems offer faster scoring feedback and can score close range single-rocket engagements.

Efforts began to enable the aerial weapon scoring system to leverage SMODIM output to preclude the "shot" call during captive missile engagement.

These efforts, which constitute a proof-of-principle for DRTS integration, were successfully demonstrated in October 2007.

Upon the provision of scheduled AH-64D Longbow

What We Are Trying to Fix



Adding basic Aviation requirements to DMPTR/DMPRC projects requires the exception to standard process.

Figure 3

software changes, crews will be relieved from the "shot" call currently required to initiate timing for captive semi-active laser (SAL) Hellfire scoring. This is the first step.

The ultimate objective is to enable AWSS to leverage SMODIM provided aircraft position, heading and weapon data in order to provide a collective scoring capability and further improve rocket scoring.

Diving fire rocket targetry options were also developed.

Fort Rucker has evaluated a 3-D metal target and a solution is now available as a Government Services Administration supply item and will soon be provided to Army installations with accompanying preparation methodology to provide a FLIR image and unclassified radar signature. See Figure 4.

Take A Knee

During 2006, significant challenges began to affect the Sustainable Range Program. DRTS experienced substantive performance issues at Fort Hood. Construction cost increases affected many installation range facilities and caused the cancellation of at least one project.

During the 3rd and 4th quarters of 2007, considerable course of action analysis was conducted; and in February the Army G3 adopted a "take a knee" strategy, delaying several digital range projects to enable opportunity to address DRTS issues and provide decision space.

While aviation requirements were not responsible for DRTS challenges or construction cost increases, projects

Targetry Solutions



Figure 4

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AVN / AG-I Home Station Training Programmed Capability Timeline

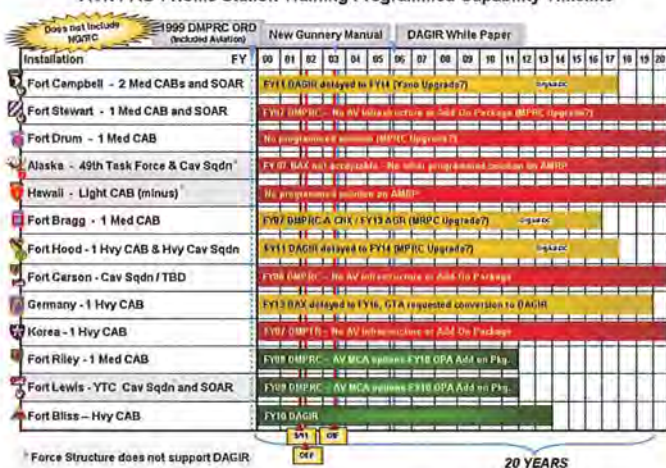


Figure 5

that support aviation were delayed. See Figure 5.

In December 2007, TCM-LT consulted with the Gunnery Branch to develop two contingency plans to ensure aviation requirements are met in the near term.

Contingencies

An "Aviation home station Interim Package" was developed that can be added to an existing legacy MPRC range to provide urban terrain and diving fire targetry. These packages are targeted for those installations most affected by the "take a knee" strategy. Additionally, TCM-LT intends to leverage the existing DA Pamphlet 415-28 Aerial Gunnery Range/AWSS facility.

The concept is to construct this facility as a legacy range and enable growth potential to digital capabilities. Both concepts leverage fielded AV-TESS components to provide a viable aviation AAR capability, an AAR capability not available on currently fielded digital ranges.

Units can accomplish improved AARs by leveraging what is available today.

Maximizing Fielded Assets

For years AV-TESS has been available for force-on-force training and is part of every TCM-LT aviation home station course of action.

Most installations with AH-64 Apaches have organic TESS available. The new ARH-70A armed reconnaissance helicopter will come with TESS sets.

TCM-LT and the Gunnery Branch have determined that there is a great training benefit that can be realized by using AV-TESS during live-fire and have relayed those benefits and capabilities to the combat developers of the *One Tactical Engagement Simulation System*.

TCM-LT is coordinating with the Tank and Automotive Command and the appropriate commercial companies to integrate AWSS, SMODIM, and fielded target control systems to provide integrated scenario execution, assessment and AAR capability by integrating existing fielded systems. This is a core feature of the *Aviation Home Station Interim Package*.

By integrating SMODIM output, AWSS scoring and aircraft recorded media or tactically provided live-feeds — such as the Apache video from unmanned aircraft systems for interoperability teaming-level 2 — it can provide a robust AAR ability today.

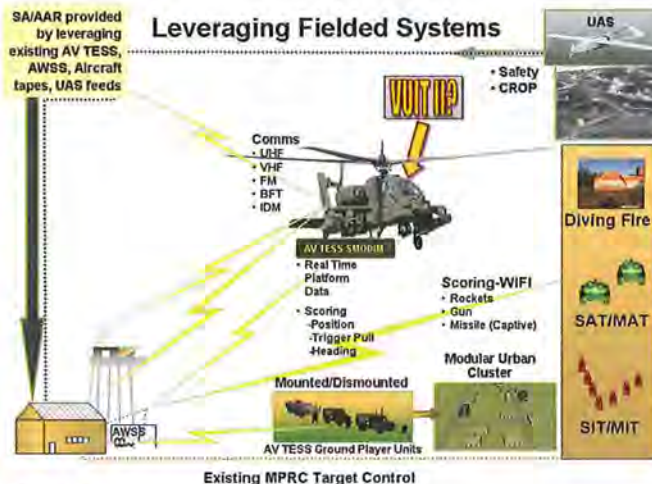


Figure 6

Applying AV-TESS ground components to friendly vehicles during collective convoy live-fire integrated advanced tables and combined arms live-fire exercises can also provide a much improved AAR on almost any range facility.

The AV-TESS "tank in a bag" can be used for captive Hellfire engagements providing additional targets that are interactive with aircraft systems.

It seems intuitive to employ a solution that will enable commanders to use the same components for force-on-force and force-on-target training.

Additionally, fielded UAS platforms can be placed in orbit over the range complex to provide video feeds for real-time situational awareness, augment rocket scoring, and greatly enhance the collective training AARs.

Leveraging the combined capabilities of fielded components such as AV-TESS, AWSS, manned platform recorded and real-time video, and UAS sensors can take scoring shack fidelity to the next level and instill training that has great potential to save lives and platforms (air and ground). See Figure 6.

Maintaining the Initiative

Combat aviation brigades are part of the team that must be heard. Both TCM-LT and the Gunnery Branch need your help.

If your range does not support your requirements, annotate it on your unit status report and articulate the discrepancy through the chain of command. If your range adversely affects operational training, then you have an "operational need." Describe that need in the form of a memorandum and get it to your Army command.

Only in this way can you empower your Gunnery Branch and TCM-LT to successfully fight for your requirements and bring a capable programmed facility to your backyard in a timely manner. If we fall short, tomorrow's aviators will be forced to train on yesterday's ranges.

COL Richard Knapp is the director of the Directorate of Training and Doctrine and CW4 Vance Paul is an AH-64 master gunner in the Gunnery Branch of DOTD at Fort Rucker, Ala. Retired CW5 Ron Moring is an aviation training specialist with the Training and Doctrine Command's Capability Management Office-Live Training at Fort Eustis, Va. Paul and Moring can be reached via email at vance.paul@conus.army.mil and ron.moring@us.army.mil.



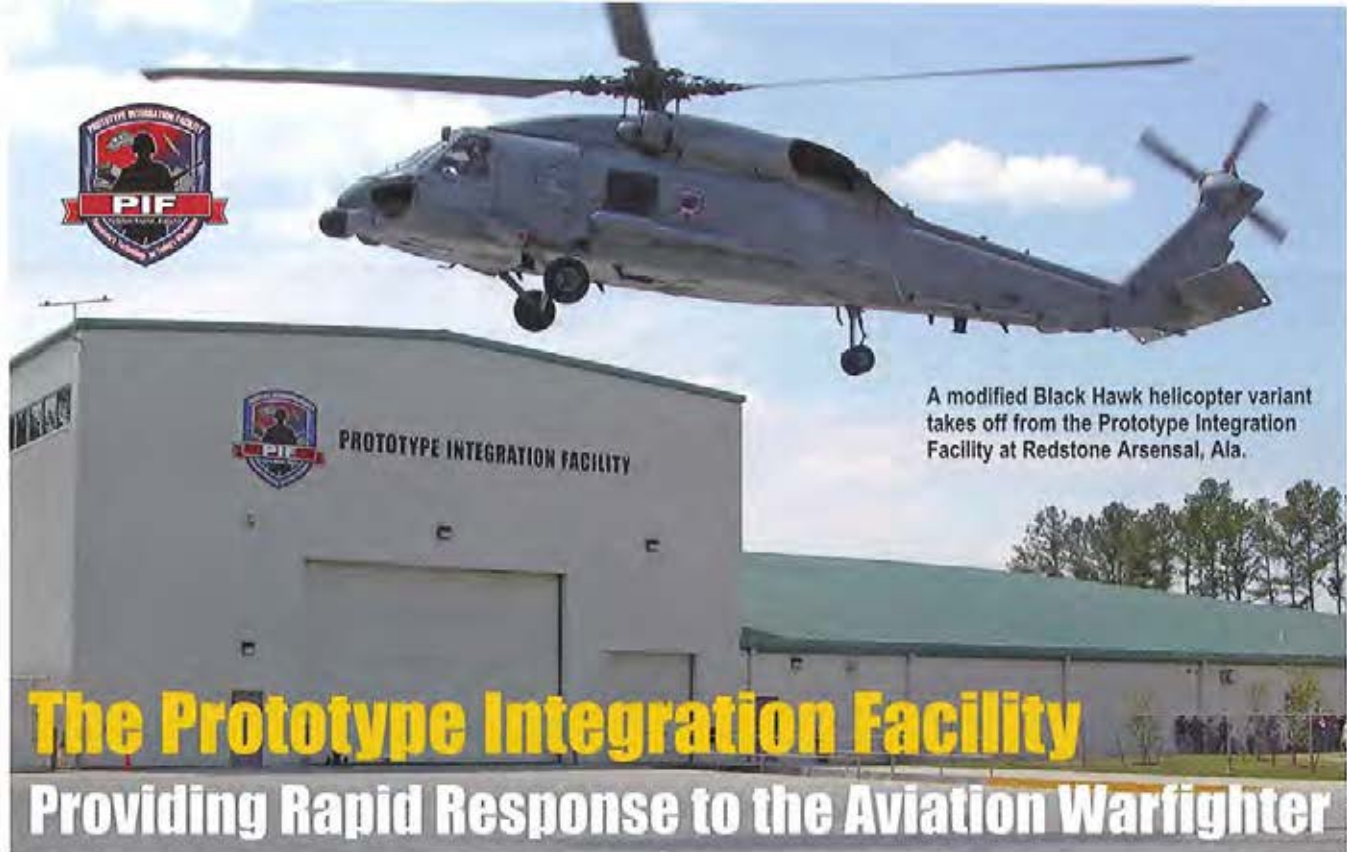
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A modified Black Hawk helicopter variant takes off from the Prototype Integration Facility at Redstone Arsenal, Ala.

The Prototype Integration Facility

Providing Rapid Response to the Aviation Warfighter

By Daniel Featherston, MAJ (Ret.) Christopher D. Perry and Laura Stone

On an ever evolving battlefield where tomorrow's technologies were needed yesterday, the Prototype Integration Facility (PIF) at Redstone Arsenal, Ala., serves the Department of Defense as a turn-key operation providing in-house, rapid response capabilities for generating hardware solutions.

The PIF, organized and commissioned in 2002, is a subordinate division of the Engineering Directorate of the Army Aviation and Missile Research, Development and Engineering Center of the U.S. Army Research, Development and Engineering Command.

It is strategically aligned with the Army Aviation and Missile Command, the Aviation Engineering Directorate, the Program Executive Office-Aviation, many program managers, and with the Army's Test and Evaluation Command.

The organization complements this alignment by teaming with prime contractor Joint Venture Yulista Management Services and with Science and Engineering Services, Inc., many original equipment manufacturers, and other industry sources.

Through continuous collaboration, the PIF often meets the most urgent Army aviation current operations, sustainment and new technology require-

ments through upgrade and modification to many aviation platforms, including the unmanned systems.

As a full service, customer-focused, government-owned and operated organization, the PIF has or has access to the necessary expertise and facilities to rapidly design, fabricate, integrate, test and field hardware solutions.

The PIF provides services ranging from upgrades, modifications, and sustainment of systems to rapid prototyping, development and integration of new technologies and equipment.

While attack helicopter tactics, techniques and procedures continuously change, one mission of the Attack Helicopter Project Management Office (AHPMO) remains constant: to increase safety and survivability for AH-64 crewmembers.

To support this mission, the AHPMO teamed with the PIF to design, fabricate and field the Apache Aircraft Survivability Product Improvement (ASPI) kit, a tailored application of insulation, blockers and redesigned exhaust. The PIF began fielding the ASPI kits in December 2006.

With several theater installs, the PIF has fielded multiple battalions and ASPI kits are operating in several areas of conflict.

The PIF continues to improve the

design and provide this life saving capability to our Soldiers.

As the lead system integrator for the Army Airborne Command and Control System (A2C2S) program, the PIF transforms designated UH-60 helicopters into flying tactical operation systems.

The A2C2S provides aircraft with data and voice communication capability, ground-to-air support, situational awareness, and a common view of the battlefield.

The modular A2C2S can be configured to an *assault* (A), *battle staff* (B) or *command* (C) mode allowing for flexibility to the individual commander dependent on mission.

The system connects commanders to their forces; it includes as many as five interchangeable workstations, large-screen displays, advanced voice and data communications suite, unmanned aircraft system (UAS) Level II control, international maritime satellite communications, and supportability improvements.

To date, the PIF has delivered 16 A2C2S aircraft, including the command configuration designed to meet specific requirements of the Multi-National Forces Iraq commanding general leading Operation Iraqi Freedom.

With proficiencies in aircraft modifi-



An A2C2S modified UH-60 Black Hawk helicopter is loaded aboard a C-17 cargo aircraft for shipment overseas in support of ongoing operations.

cation, the PIF is often tasked with many urgent programs including support of an Intensive Management Office, U.S. Army Security Assistance Management Directorate requirement to provide five flyable 206B-III Jet Ranger helicopters to the Iraqi Air Force for immediate training capability.

The PIF is providing procurement, modification and testing of the five aircraft; their specific modifications include avionics packages, night vision goggle (NVG) filtering, inlet barrier filters, and other hardware packages to support operation and maintenance training.

The PIF will deliver the aircraft, with air worthiness releases, for full operation by this December.

In support of the Utility Helicopter PMO, the PIF is leading the design, fabrication, integration, logistics support, and the training efforts for the UH-60M Commander's Hawk (COMHAWK) program.

Modifications to the UH-60M include an intercom system with private network, radios with communication rack, seating, Blue Force Tracking, lighting, 120 Volt outlets, exterior steps, auxiliary power unit exhaust deflector, forward looking infrared systems, environmental control system, traffic and collision avoidance system, and conformal external tanks.

The COMHAWK aircraft will be used to provide mobility and communication for battlefield commanders in the forward area of a combat environment.

The PIF continuously supplies mission kits and individual subsystems to multiple platforms in theater including the infrared strobe kits used in concert

with existing NVG to provide pilots a way to distinguish aircraft at night without being identified by the enemy.

Also included are the M4 gun mounts designed to provide safe and secure stowage of crew member weapons, and infrared laser kits which are used to covertly coordinate machinegun target designation with ground forces. The mission kits improve aircraft survivability and crew protection capability.

In continued support of the Global War on Terrorism, the PIF developed, integrated, and tested a communication relay system (CRS) for the Shadow 200 UAS.

The system extends transmission range of standard military radios and enhances reconnaissance, surveillance and target acquisition mission capabilities of the Shadow 200.

The CRS allows the ground control station operators to communicate directly with forward deployed ground troops, provide them with early warning and real-time intelligence at distances more than 100 kilometers away, and enables non-line-of-sight communications with ground based and manned aviation units.

The system is an in-band relay using the SINCGARS advanced system improvement program radios, which can be removed and installed on the Shadow 200 RQ-7B depending on mission needs.

Recipient of the 2006 Army Research Development and Achievement Award and the Army's "Top 10 Inventions for 2007," this PIF system is now deployed in support of the Global War on Terrorism.

The PIF's focus is on the Army



An Army airborne command and control system (A2C2S) workstation is installed inside the forward cargo area of a UH-60 Black Hawk helicopter.



A Shadow 200 UAS launches on a mission with communication relay systems equipment installed aboard. The PIF conducted the CRS integration and testing.

warfighter, from aviators to infantry Soldiers. Built on the tenets of collaboration and continuous improvement, the PIF demonstrated their commitment to providing our Soldiers with the highest quality rapid response by its gaining ISO 9001 certification in April 2008.

Over the past six years the PIF has developed a culture adept to changing to meet ever-evolving mission requirements and continues to be a leader in providing rapid response for the warfighter.

By assembling the necessary government and industry expertise, the PIF provides the U.S. Army with a single-source, turn-key operation dedicated to the warfighter.



Daniel Featherston is the manager and division chief of the Prototype Integration Facility. Retired MAJ Christopher Perry is a contract consultant with Intuitive Research and Technology Corp., and Laura Stone is a project lead for JVYS, both supporting the PIF at Redstone Arsenal, Ala.



Ask the Flight Surgeon

Dr. (COL) John P. Albano with Dr. (MAJ) Nicole Powell-Dunford

Editor's note: We are pleased to bring you a new regular feature to *ARMY AVIATION* magazine, "Ask the Flight Surgeon." Dr. (COL) John Albano, a flight surgeon and the Army associate director to the U.S. Navy Aerospace Medicine Residency Program, will help to provide answers to frequently asked questions on topical aviation related health issues of the day.

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.

Q: Is there anything I can do to increase my survivability in a crash?

FS: The U.S. Army Aeromedical Research Laboratory has spent millions of dollars and years of research into making Army aircraft crash-worthy and your personal protective equipment (PPE) effective during a crash. We all know that wearing your seat belt and donning your PPE properly goes very far in protecting you. If we do get injured in a crash, we don't often think what we could have done to make sure our bodies are at their peak to maximize the healing process. There are several simple steps that any crew member can take to reduce the risk of injury or death in the event of a crash.

▶ **Stop smoking altogether!** Tobacco use can compromise your ability to survive traumatic injuries. It causes delayed wound healing and a poor ability to oxygenate vital organs. If you need help quitting, see your flight surgeon for counseling, patches or pills.

▶ **Avoid self-medication.** Healthy crew members are more likely to survive a crash than those compromised by an undiagnosed health problem or by medication side effects. High doses of aspirin or ibuprofen (known by the

brand name Motrin) can slow the blood clotting process. Be sure to communicate with your flight surgeon about any medical problems you may have.

▶ **Exercise regularly.** High fitness level improves your body's ability to tolerate traumatic injury.

▶ **Obtain first aid and basic medical training.** Knowing the first steps to take in treating serious injuries in the first hour can make all the difference in survival.

▶ **If injured, maintain your body temperature.** The body's blood clotting system doesn't work well at low temperatures. A 1-degree loss of core body temperature can lead to fatal bleeding from an otherwise survivable injury.

Q: I'm looking to improve my weight lifting performance. How safe are supplements?

FS: Weight lifting is a good part of a well rounded fitness program and fitness is sure to give you an edge on every mission. However, supplements offer little benefit when compared to a proper diet. Worse yet, supplements have little regulatory oversight. Hence, ingredients may be misleading and the manufacturers' claims do not need to be proven. This puts you at risk for health problems and/or random urine drug test failure. The aeromedical policy prohibits the vast majority of supplement use with the exception of standard, non-mega dose vitamins and protein, and creatine in forms other than sports drinks. Sports beverages that contain creatine, ephedra or herbs are not permissible. Although some studies show creatine can improve specific types of performance in highly trained athletes, at least one study shows the same degree of improvement in athletes using a fake pill. You should know that safety data on long-term creatine use is limited

and weight gain is a common side effect of its use. Both creatine and protein supplements can increase the risk of dehydration. The use of protein supplements show little additional benefit beyond the 1 to 1.5 grams/kg/day in athletes and supplementation that exceeds normal daily requirements (10-15 percent of your total calories) will be converted into fat. Certain high dose vitamins can cause permanent organ damage and supplements can interact dangerously with prescription drugs. Ephedra has directly contributed to several active duty heat-stroke fatalities. The best way to improve fitness is dedication towards a smart workout routine and a proper diet. To mitigate injury, you should avoid sudden increases in lifting or overuse of individual muscle groups. Appropriate fluid intake prior to, during and after exercise is proven to improve performance, shorten recovery time and reduce injury. Consult your flight surgeon for further information.

Do You Have a Question for the Flight Surgeon?

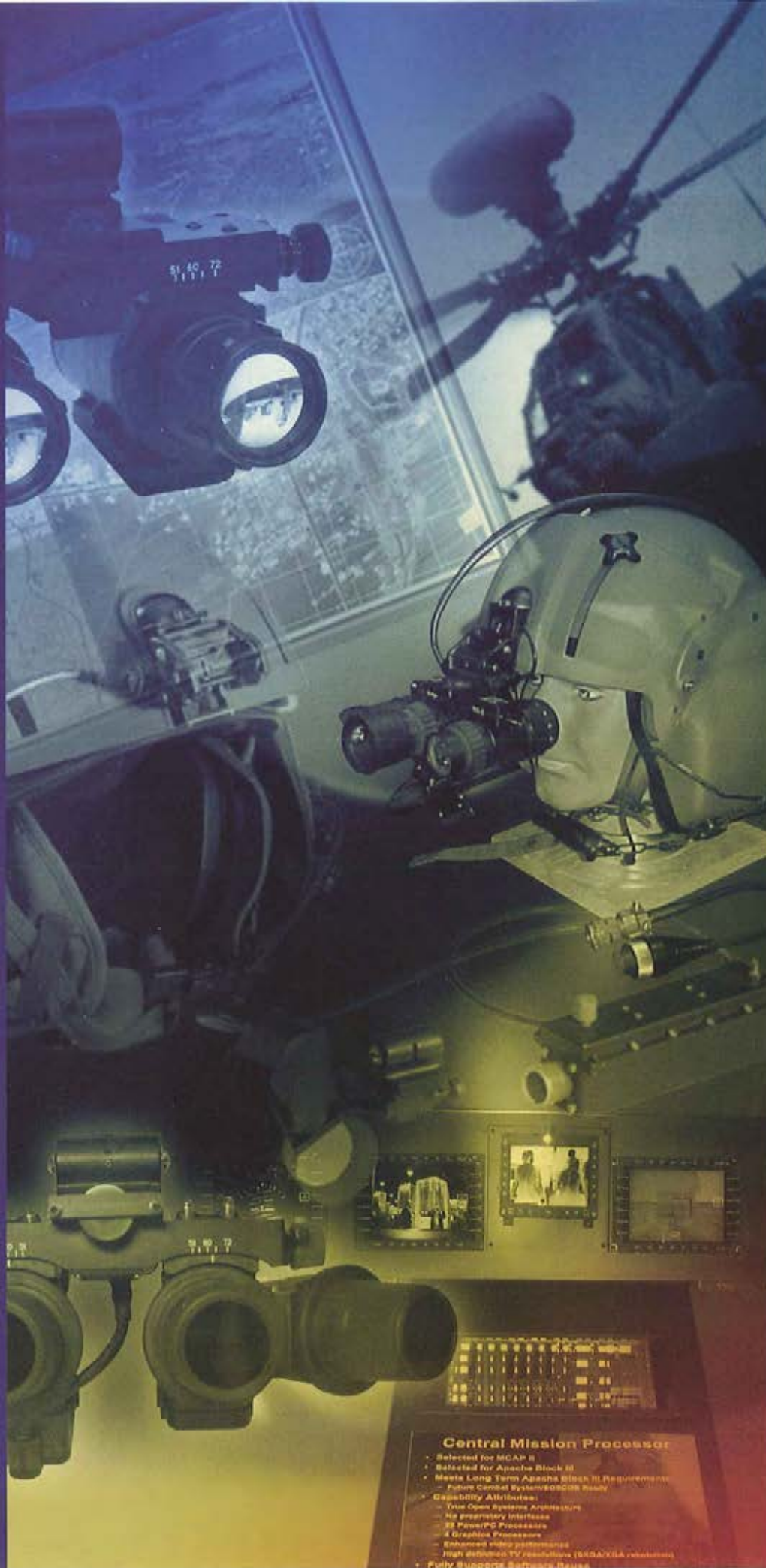
Leaders, crew members, flight docs and maintainers: if you have a question you would like addressed, send an email to AskFS@quad-a.org. Depending on the questions we receive, we'll try to answer it in a future issue of the magazine. Contact your unit flight surgeon for your personal health issues. As always, fly safe!



Dr. (COL) John Albano is a flight surgeon and the Army associate director to the U.S. Navy Aerospace Medicine Residency Program, Pensacola NAS, Fla. Dr. (MAJ) Nicole Powell-Dunford is also a flight surgeon and a resident in aerospace medicine.



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Recognizing the Stress of Deployments on Military Youth

By Judy Konitzer

Military children are unique and share in a rich legacy of service to our nation. At the same time, these children also make great sacrifices because of compulsory conditions in which they find themselves, i.e. frequent moves, high optempo, repeated deployments, and parental exposure to potential physical and psychological injuries.

Today, an entire generation of military youth are affected by the absence of one or both parents; and it is well recognized that Soldiers do not focus as well on their missions if they are worried about their families.

Preventative psycho-educational support, which is youth centered and emotionally connecting and engaging, is crucial to helping these youth during the stresses of wartime, and thus becomes a readiness issue.

Physical and Emotional Effects

According to military pediatricians and psychiatrists, the effects of deployments on children vary and depend on age.

Young children and toddlers, who can't put feelings into words, may regress in behavior. Bed-wetting, using baby talk, or climbing into a caregivers lap for reassurance that someone is still there, are a common phenomenon. A preschooler may engage in disruptive behavior such as biting or hair pulling, or have difficulty separating from mom or dad at child care.

With increased age comes increased understanding and with that understanding may come fear. Fearing that a parent may forget about a child, become injured or fail to return from a deployment is all too common. School age children may suffer from anxiety, perform poorly in school, or voice physical complaints. Older children may also face increased responsibilities at home, helping to fill the void left by the deployed parent. Some adolescents feel bitter or angry, some feel depressed, others are consumed by fear, and yet others channel their emotions via rebellious and troublesome behavior. Drug or alcohol use and promiscuity may be concerns.

Many parents notice behavioral changes in their children before, during or after parental deployments. This is not unusual, and is most appropriately addressed through meaningful discussions.

Some parents hesitate to talk about their children's behavioral changes or other family challenges – feeling that they need to maintain a strong front in support of the deployed family member. In actuality, discussing the emotions, stressors and changes in the family dynamic can be helpful for all family members.

Videos for Young Children

In August 2006, the Sesame Street Workshop partnered with Wal-Mart to create "Talk, Listen, Connect: Helping Families during Military Deployment," a movie suitable

for ages 3 to 5. This short film, featuring Elmo and his daddy, helps toddlers and preschoolers relate to a familiar icon as he goes through a similar long-term parental absence situation. The movie is free and comes with supplemental reading material for parents when ordered online at www.sesameworkshop.org/tlc/.

Released in June 2007, "Mr. Poe and Friends Discuss Reunion after Deployment" is an animated feature developed for elementary school-aged children. This cartoon highlights some of the unique challenges and emotions a child can wrestle with during reintegration after deployment of maternal or paternal parents.

It provides a starting point for discussion and helps normalize many of the emotions that a child faces. The video is available free from Military One Source at www.militaryonesource.com.

Adolescent Stress Management Plans

Dr. (MAJ) Keith Lemmon, pediatrician and adolescent medicine faculty member at Madigan Army Medical Center, Fort Lewis, Wash., became aware of the need to provide more support for deployed families when he was sent to Afghanistan with the 82nd Airborne Division in 2002.

Lemmon and his teacher wife then had a 6 month-old daughter and a 4-year old son. They noticed behavioral changes in their son as a result of the deployment, in spite of their best efforts to assuage his concerns.

It became apparent that couples with less experience in child development might have even more trouble. During his fellowship at the Brooke Army Medical Center, Lemmon studied the effects of deployment on adolescents, and subsequently, along with military pediatricians and the American Academy of Pediatrics (AAP), created a video support program specifically for older children and adolescents.

The "Military Youth Coping with Separation: When Family Members Deploy" video features interviews with real teens going through family deployments, and it touches on a broad range of emotions and fears that an older child or teen may face.

Coping with the fear of their parents dying or getting hurt, frustration with having to assume more home responsibilities, and having less time for friends and other activities, lack of understanding from peers who don't have parents fighting in the war, and watching TV news and how negative coverage affects them are some of the issues addressed.

This 30 minute video strives to show that sharing these emotions is normal and acceptable, and there are other kids going through the same thing at the same time. "The aim of the video is to decrease the stigma and isolation these kids may feel and honor what they are going through," Lemmon said.

A great supplement to this video is the "Interactive Military Youth Stress Management Plan," an interactive tool developed to walk teens through the process of identifying their specific stressors and developing methods to effectively cope with them. This stress management plan and video are available at www.aap.org/sections/uniformedservices/deployment/videos.html.

All of the videos mentioned above are available free of charge and can be ordered or watched online.

It is recommended that caregivers (parent, grandparent or teacher) watch the video with the child and spend time afterward discussing the feelings experienced during the showing. This can open up lines of communication regarding potential feelings. Watching the videos with other children experiencing parental deployments can also be helpful.

It allows each child to gain a better understanding of their own emotional reactions to deployment, while learning positive ways to cope with these reactions.

Facilitator's guides are available for parents, primary care physicians, teachers, church and scout leaders, or any other concerned adults.

Out Reach to Civilian Communities

Military pediatricians are well-versed on the deployment stresses placed on families; however, civilian physicians may not be. This is a concern with almost 40 percent of the deployed Soldiers serving in Iraq and Afghanistan being Reserve or National Guard troops.

These families typically live in their home communities; their children go to regular schools and see civilian pediatricians. Their families do not have the built-in support system that comes with living at a military installation.

Recognizing this, collaborative work with the AAP helps to oversee and coordinate research, training, youth support and advocacy efforts. Since 2007, the AAP has published multiple articles related to military youth deployment support in their news products. In August, the AAP published its "The Effect of Deployment on Children" program as part of its continuing medical education courses. In addition, the first "Summit on Military Child and Adolescent Behavioral Health and Well Being during Wartime and Beyond" conference was held June 2 to 4 McChord Air Force Base, Wash.

In Closing

Many families are beginning to learn that there are a variety of resources available specifically focused on military children and adolescents. Please become familiar with them and provide information and support to our military youth.

A special thanks to Dr. (MAJ) Lemmon and to Madigan Army Medical Center for assistance with information and resources for this article.



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

Military Child & Adolescent Support Service Web Sites

AAP Deployment Support

www.aap.org/sections/unifserv/deployment/index.html

Army Behavioral Health

www.behavioralhealth.army.mil/families/index.html

Military One Source

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Industry News

And Announcements Related to Army Aviation Matters

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

44th Lakota Takes Flight



The first flight of the 44th UH-72A Lakota light utility helicopter occurred Sept. 16 at the **American Eurocopter** facility at Columbus, Miss. This helicopter is the first full assembly line (FAL) aircraft and marks the second phase of the production transfer process

started in April and continues until May 2010. The FAL will run concurrent with both the light assembly line (LAL) and production line phases. The LAL phase ends next May and has been running since the program began. The planned duplication of UH-72A production capability is on schedule and 47 aircraft will be produced as FAL aircraft. During the FAL phase, stations 01 through 06 are completed at the Donauwörth, Germany plant and stations 07 through 14 are completed in Columbus.

Air Warrior Adds Flexible Body Armor

BAE Systems, Phoenix, Ariz., was awarded Sept. 15 a \$5 million contract from the Army for Air Warrior flexible body armor. The FBA protects aircrew members from fragmenting munitions and handgun threats, while providing freedom of movement at flight controls, improves mobility, enables ingress and egress from the aircraft and offers enhanced comfort and cooling. Additional protection against rifle bullets can be added by inserting the small arms protective insert plates. Production of FBA will be in Arizona with deliveries scheduled for completion by October 2009.

Upgraded UH-60M Achieves 1st Flight



Sikorsky Aircraft Corp., West Palm Beach, Fla., successfully completed the first flight of the UH-60M Upgrade Black Hawk helicopter Aug. 29 at its West Palm Beach facility. During the 60 minute test flight, chief test pilots Mike Skaggs and Steve Silder maneuvered the aircraft

through a variety of exercises including hover, forward flight and a hover turn. The UH-60M Upgrade is currently the only fly-by-wire rotary wing aircraft in flight test development within the Army.

Army Materiel Command Awards SPOTS

WestWind Technologies, Huntsville, Ala., announced it is one of three prime contractors awarded the Scientific, Professional and other Technical Services (SPOTS) program contract Aug. 29 by the Army Materiel Command. The 5-year program has a value of \$50 million and provides the Army with greater specialization and expertise in state-of-the-art and emerging technologies to meet growing needs in aviation. The contract includes engineering and technical services for the Aviation Applied Technology Directorate at Fort Eustis, Va., which focuses on rotorcraft and other related multi-discipline technology research and integration. The other primes are **Dynetics** and **U.S. Falcon**.

Apache VUIT-2 Moves to Production

Lockheed Martin, Orlando, Fla., announced July 30 the award of a contract from the Army Aviation Applied Technology Directorate to lead the Apache VUIT-2 program (video from unmanned aircraft systems for interoperability teaming-level 2) through September 2009. As the systems integrator, LM will transition VUIT-2 to production. The VUIT-2 system receives streaming battlefield video and metadata from unmanned aircraft systems

and displays it on Apache cockpit multi-purpose displays, and also transmits both Apache gun camera and UAS video, via a mini-tactical common data link, to Soldiers on the ground. The Army first awarded LM a 2007 contract for development, production and rapid fielding of the VUIT-2 system.

Army Awards FLIR Modification Contract

FLIR Systems, Inc., Portland, Ore., announced Aug. 28 the award of an \$11.1 million modification to a performance based logistics (PBL) support contract from the Army. The contract provides for services, upgrades and logistics support for Army and Marine Corps programs with the Star SAFIRE III and THV-3000 systems.

Air Warrior Mod Contract Awarded

WestWind Technologies, Inc., Huntsville, Ala., received a 5-year, \$38 million contract award July 23 from the Army to support the Air Warrior program in its mission of developing and fielding integrated Soldier systems for Army aircraft crew members. WestWind will incorporate production modular systems that increases freedom of movement at flight controls and increases mobility to operate aircraft systems safely, and airframe modification kits on the OH-58D, CH-47D, UH-60A/L and AH-64D model aircraft, to include both "A" and "B" kits, as well as push package spares.

New "Around-the-World" Helicopter Record Set

A pair of pilots succeeded August 18 in flying around the world, setting a new rotary wing speed record, in a factory-standard Agusta-Westland Grand helicopter in only 11 days, 7 hours and 2 minutes. Pilots Scott Kasprovicz and Steve Sheik broke the previous record by nearly 6 days, flying at an average speed of 74 knots over the entire 11 days including the stops, and with an average speed of 150 knots while airborne. The flight originated and returned to New York's LaGuardia Airport after flying almost 21,000 nautical miles across 18 countries. The record of the flight is under review by the National Aeronautic Association.



Army Buys 191 CH-47F Chinook Helicopters

The Boeing Company, St. Louis, Mo., received a 5-year contract Aug. 26 from the Army to build 181 CH-47F Chinooks and 10 additional Chinooks under fiscal year 2008 supplemental funding. The contract is valued at \$4.3 billion, and with options in the award for an additional 24 aircraft over the course of the contract. "This multiyear award will yield a cost savings of more than \$449 million for the U.S. Army and taxpayers," said Jack Dougherty, Boeing's H-47 program vice president.

Shadow UAS Training Contract Awarded

AAI Corp., Hunt Valley, Md., announced Aug. 26 that its family of training aids, devices, simulators and simulations (TADSS) were selected to support training for Army National Guard units operating the RQ-7B Shadow tactical unmanned aircraft systems. The \$11.9 million contract provides for 25 high fidelity Shadow Crew Trainers (SCT) and interactive multimedia instruction. Each SCT features two simulated ground control stations, a role player, and a ground crew launch and recovery station controlled by an integrated instructor and operator station. The TADSS suite provides training for aircraft and payload operators, launch and recovery crews, mission commanders, and battle staffs that rely on Shadow systems for battlefield intelligence.

Army Recognizes PPC for "Outstanding Value Engineering"



The Joint Attack Munition Systems Project Office presented **Protective Packaging Corp.**, Carrollton, Texas, with a certificate of appreciation July 8 for its value engineering achievement while working to provide a protective barrier for the M299 Launcher system. PPC's efforts resulted in a cost avoidance of \$14.8 million for the Army. Here (l to r), PPC's V.P. and General Manager Jim Hiller, Production Manager Alex Ibarra, center with certificate, and President Steve Hanna show off their award.

PEOPLE ON THE MOVE

Editor's Note: Army Aviation is seeking good-news announcements of aviation-related professionals who are on the move. If you or your organization have an upcoming change of leadership (at the battalion or squadron level or higher for MTOE and TDA units) please forward the information to: editor@quad-a.org

AVIATION GENERAL OFFICERS

PROMOTIONS

On Oct. 2, the Senate approved President George W. Bush's Sept. 2 nomination of **BG James O. Barclay III** for promotion to the rank of major general, with an effective date of Oct. 2. **MG Barclay** pinned on his second star Oct. 6 in a small ceremony in Washington, D.C. He is the commanding general of the U.S. Army Aviation Center of Excellence and Fort Rucker, Ala.

Secretary of Defense Robert M. Gates announced Sept. 22 that President George W. Bush has nominated **MG James H. Pillsbury** for promotion to lieutenant general and assignment as deputy commanding general and chief of staff of the Army Materiel Command, Fort Belvoir, Va. He is currently serving as deputy chief of staff for Logistics and Operations with AMC at Fort Belvoir.

BG Anthony G. Crutchfield received his first star July 3 during a promotion ceremony. He is currently serving as the director of the Joint Center for Operational Analysis-Lessons Learned with the U.S. Joint Forces Command, Suffolk, Va.

ASSIGNMENTS

The Army chief of staff announced Sept. 10 the assignments of the following officers:

BG Rhonda Cornum, assistant surgeon general for Force Projection, Office of The Surgeon General, Washington, D.C., to director of Comprehensive Soldier Fitness, Office of the Deputy Chief of Staff for Operations, G-3/5/7, Washington, D.C.

BG Raymond P. Palumbo, deputy commanding general of the Joint Special Operations Command, Fort Bragg, N.C., to deputy commanding general of the U.S. Army Special Operations Command, Fort Bragg.

SENIOR EXECUTIVE SERVICE

Secretary of Defense Robert M. Gates announced July 18 the appointment of **John B. Johns** as the assistant deputy Under Secretary of Defense for Maintenance Policy and Programs, Office of the Under Secretary of Defense for Acquisition, Technology and Logistics, Washington, D.C.

CHANGES OF COMMAND & RESPONSIBILITY

COL Steward E. Remaly relinquished command Aug. 7 of the U.S. Army Air Operations Group for the Military District of Washington, to **COL Jill Ludowese** at Davison Army Airfield, Fort Belvoir, Va. Ludowese previously served as the inspector general for the U.S. Central Command, MacDill Air Force Base, Fla. Remaly is now serving as a liaison officer for the U.S. Special Operations Command to the Drug Enforcement Agency in the Washington, D.C. area.

The U.S. Army Air Operations Group conducted a change of responsibility ceremony July 30 between **CSM Herbert W. McCoy** and incoming **CSM Lawrence V. Mione** at Davison Army Airfield, Fort Belvoir, Va. McCoy will retire Feb. 1 after more than 32 years of service to the nation. Mione previously served as the command sergeant major of the 12th Avn. Bn. at Davison AAF.

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

Honeywell International Inc., Albuquerque, N.M., was awarded Sept. 3 an \$11M contract for the design, development, integration, testing and qualification, delivery and support for the upgrade of the OH-58D Kiowa Warrior aircraft control display system and the improved master processor unit. Work will be performed until Dec. 31, 2011.

Lockheed Martin Missiles and Fire Control, Orlando, Fla., was awarded Sept. 1 a \$16.9M contract for non-recurring engineering, integration and qualification of modernized target acquisition designation sight and pilot's night vision sensor selected obsolescence replacement components. Work will be performed until June 30, 2011.

Simmonds Precision Products Inc., Vergennes, Vt., was awarded Aug. 27 a \$31.7M contract for the procurement of integrated vehicle health management system kits, ground support equipment kits and deployment spares in support for the UH-60 helicopter. The estimated completion date is July 31, 2013.

Telford Aviation Inc., Bangor, Maine, was awarded Aug. 27 a \$36.6M contract for the procurement of components of the Multi-Sensor Airborne Reconnaissance Surveillance System. Deliveries are to be completed by June 6.

Bell Helicopter Textron Inc., Hurst, Texas, was awarded Aug. 27 a \$6.2M contract to add three items to an existing long-term contract, including 30 cowling assemblies, for the OH-58D Kiowa Warrior. Contract completion is March 31, 2011.

General Atomics Aeronautical Systems, San Diego, Ca., was awarded Aug. 15 a \$7.8M contract to acquire three extended-range, multi-purpose Block 0 unmanned aircraft in support of Operation Iraqi Freedom and Operation Enduring Freedom. Deliveries are to be completed by March 31, 2010.

Hellfire Systems LLC, Orlando, Fla., was awarded Aug. 15 a \$356.6M contract for Hellfire II anti-tank missiles, with deliveries completed by Oct. 31, 2011.

GE Engine Services, Inc., Cincinnati, Ohio, was awarded Aug. 14 a \$9.9M contract for maintenance and overhaul of 10 conversion / recapitalization T701C to T701D engines. Work is to be completed by Aug. 31, 2012.

General Atomics Aeronautical Systems, San Diego, Calif., was awarded Aug. 14 a \$10.4M contract for logistics support for the IGNAT and Sky Warrior (Alpha) unmanned aircraft systems. Contract ends January 31.

AeroVironment Incorporated, Simi Valley, Calif., was awarded Aug. 13 a \$17.7M contract for additional Army standard Raven systems and initial spares packages. Deliveries are to be completed by January 31.

Evergreen Helicopters, Inc., McMinnville, Ore., was awarded Aug. 11 a \$9.5M contract for MEDEVAC services at Fort Wainwright, Alaska until Aug. 31, 2009.

Raytheon Company, McKinney, Texas, was awarded Aug. 12 a \$15.2M contract for continued contractor support to sustain forward looking infrared systems and subsystems for 18 months for the Army, Air Force, Navy and Marine Corps, and include systems on Army MH-60, MH-47 and MH-6 aircraft.

US Divers Co., Inc., Vista, Calif., was awarded Aug. 8 a \$5.4M contract for portable helicopter oxygen delivery systems with deliveries completed by Aug. 31, 2013.

Robertson Aviation, L.L.C., Tempe, Ariz., was awarded July 31 a \$5.2M contract for internal auxiliary fuel systems. Deliveries to be completed by Dec. 31, 2011.

McDonnell Douglas Helicopter Co., Mesa, Ariz., was awarded July 28 a \$79.7M contract for the procurement of five war replacement AH-64D Longbow aircraft, with deliveries completed by April 30, 2011.

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CHANGES OF COMMAND & RESPONSIBILITY



4th SOAR Bn. Gets New Commander
LTC James C. Dugan relinquished command of the 4th Bn., 160th Spec. Opns. Avn. Regt. (Abn.), to LTC Michael J. Hertzendorf during a July 17 change of command ceremony at Fort Lewis, Wash. Hertzendorf recently served as the joint air officer with the U.S. Special Operations Command, McDill Air Force Base, Fla. Dugan retires after more than 21 years of distinguished service to the nation. Above, Hertzendorf accepts responsibility and the colors for the 4-160th SOAR from COL Clayton M. Hutmacher, 160th SOAR commander, during the change of command ceremony.



"Wings of Lighting" Change CSM
CSM Roger Kingston relinquished responsibility as the senior enlisted leader of the 25th Cbt. Avn. Bde. to CSM Jesus Ruiz during a change of responsibility ceremony July 25 at Wheeler Army Airfield, Hawaii. Following morning physical fitness training, COL Michael Lundy, 25th CAB commander, presided over the ceremony in which a saber was passed from Kingston to Ruiz. Ruiz previously served as the command sergeant major of the 25th CAB's 3rd Bn., 25th Avn. Regt. Kingston is now the CSM of the 1st Avn. Bde, Fort Rucker, Ala. Here, Kingston prepares to pass the saber right to Lundy for presentation to Ruiz.

SENIOR CW5 TRANSFERS

CW5 Mark Riddle, formerly with the 21st Air Cav. Bde., Fort Hood, Texas, has replaced CW5 Howard Swan as the aviation standardization officer with the Aviation Directorate, Office of the

Deputy Chief of Staff for Operations, G-3/5/7. Swan has assumed responsibility from CW5 Charles Lent as the standardization officer with the Directorate of Evaluations and Standardization at Fort Rucker, Ala. Lent has retired after 26 years of service to the nation.

TRANSFER OF AUTHORITY



TF49 Relieves 3rd CAB
Task Force 49 cased their colors July 12 after eight months at Joint Base Balad supporting the the Multinational Corps-Iraq for a transfer of authority to Task Force XII (12th Cbt. Avn. Bde.) Then TF49 uncased their colors July 25 at the Baghdad International Airport after relieving the 3rd CAB and assuming responsibility for combat aviation operations in support of the Multinational Division-Center. The 3rd CAB returned to their home station at Hunter Army Airfield in Savannah, Ga. Here, COL Chandler Sherrell, right, TF49 commander, and CSM Richard Mitchell unfurl the task force's colors at Baghdad IAP.

RETIREMENTS



Retired Guardsman Receives LOM
BG Thomas Katkus, commander of the Alaska Army National Guard, presented retired CW4 Bruce Perry with the Legion of Merit award July 21 at the Bethel National Guard Hangar. Perry was honored for his 37 years of selfless devotion in service to the nation, 26 years with the Alaska Guard. Perry, who retired in August 2005, last served as the aviation maintenance officer with Co. A, 1st Bn., 207th Avn. Regt., at Bethel. A

Vietnam veteran, Perry flew UH-1 and UH-60 helicopters, and the Twin Otter aircraft during his career. Today Perry serves with the Federal Aviation Administration as a pilot examiner.

COMBAT AWARDS



First CMBs Awarded to MEDEVAC
Seven flight medics with Co. C, 2nd Bn., 1st Avn. Regt., were the first to receive the new Combat Medic Badges awarded to medical evacuation crews during a July 28 ceremony at Contingency Operating Base Speicher, near Tikrit, Iraq. For their actions during combat operations in northern Iraq while flying in support of Task Force Iron (1st Armored Div.) the CMB was awarded to SSG Kory Werts, SSG Lanier Patterson, SGT Ethan Rogers, SGT Jovan Salazar, SGT Tyrone Jordan, SPC Nathaniel Northrup and SPC Stacey Dill. The CMB recognizes the unique service and selfless sacrifices of medical personnel in contact with enemy or under fire. Here, LTC Michael Tetu, 2-1st Avn. commander, pins a CMB on SGT Salazar. All of the awardees are based out of Fort Riley, Kan. and deployed with the 1st Inf. Div.'s combat aviation brigade.



Door Gunners Awarded Bronze Stars
Two 25th Cbt. Avn. Bde. Soldiers, who served as UH-60 door gunners in Iraq, were awarded the Bronze Star with valor on July 24 at Wheeler Army Airfield, Hawaii. BG Robert Brown, the 25th Inf. Div. deputy commanding general for support, presented the medals to SSG Christopher Elliot and SGT Corey Haynes, both assigned to the 2nd Bn., 25th Avn. Regt., for their selfless heroism and personal courage, which saved the lives of fellow Army Special Forces Soldiers. On Sept. 10, 2007, both men were serving as part of a Black Hawk aircrew during a night air assault mission in northern Iraq. Immediately after inserting a Green Beret

team into a landing zone, the team began taking heavy accurate enemy fire and suffered three wounded. The aircrew quickly returned to the LZ and Elliott and Haynes, without regard for their personal safety, both departed the aircraft to recover the three wounded men and expedite their evacuation to a nearby combat support hospital. Above, Brown pins the Bronze Star on Elliot, center, as Haynes awaits his medal.



Combat Awards Presented in Korea

The Bronze Star and Air Medal with Valor device were awarded to **CW4 Anthony "Tony" Reed** by LTC Cory Mendenhall, right, May 16 at Camp Eagle, Wonju, Korea. Reed, now the standardization instructor pilot of the 1st Bn., 2nd Avn. Regt., was recognized for his bravery and actions against a hostile enemy while deployed with the 4th Bn. 227th Avn. Regt. in support of Operation Iraqi Freedom. Mendenhall made the presentations on behalf of the 4-227th command.



2-25 Avn. Awarded Combat Streamer

BG Robert Brown, right, 25th Inf. Div. deputy commanding general for support, with the assistance of COL Michael Lundy, center, 25th Cbt. Avn. Bde. commander, add a Meritorious Unit Commendation streamer to the colors of the 2nd Bn., 25th Avn. Regt. commanded by LTC David Francis, left. The 2-25th Avn. was recognized during a July 24 ceremony at Wheeler Army Airfield, Hawaii, for distinguishing itself with meritorious service for at least six continuous months during combat operations in support of the Multinational Division-North in Iraq.



"Dustoff" Crew Saves Six

On America's Independence Day, four MEDEVAC Soldiers of the 101st Cbt. Avn. Bde. were recognized for their heroism during a July 4 awards ceremony at Forward Operating Base Fenty in Jalalabad, Afghanistan. **SGT Adam Connaughton** received the Bronze Star for valor, and **CW3 Christopher Hill**, **CW2 Nicholas Dance** and **SGT Aaron Tuten** were each awarded the Air Medal with Valor device. On April 6, the crew of "Dustoff 34" responded to a medical evacuation request from a Special Forces team taking heavy casualties in an isolated mountain valley. The landing zone was never declared clear of enemy fire, but the crew landed without regard for their safety. Pilots Hill and Dance conducted a difficult one-wheel landing, while crew chief Tuten provided instructions to guide the wheel down onto a terrace and keep the rotors clear of a nearby mountain. Then flight medic Connaughton exited and proceeded down a flooded riverbed to

retrieve the wounded. However, suspected enemy fire caused sudden uncontrollability of the main rotor blades, forcing the crew to return for repairs. Connaughton was isolated with six "urgent" patients and under direct hostile fire from the ridge above. He transported the casualties 30 additional meters, through waist-high running water, to another helicopter across the river. He tended to the life-threatening injuries, keeping all patients alive during the subsequent evacuation. Here, l to r, Dance, Tuten, Connaughton and Hill after receiving their combat awards.

SPOTLIGHT



Aviation Guardsman Top Soldier

An Aviation Soldier was named the Army National Guard's top Soldier of the Year after two days of "Best Warrior" competition Aug. 11-13 at Fort Benning, Ga. **SPC Jeremy Whipple**, above left, of Utah's Co. E, 1st Bn., 211th Avn. Regt., based in West Jordan, was named the Guard's Soldier of the Year Aug. 21 during the Association of the National Guard of the United States convention in Savannah, Ga. **SSG Michael Noyce-Merino**, from Montana's Troop B, 1st Sqdn., 163rd Cav. Regt., was named the NCO of the Year. Both Soldiers advance to the Department of the Army competition, scheduled in October at Fort Lee, Va. The runner-up Soldier of the Year was **SPC Joel Cadett** with HHC, 1st Bn., 169th Avn. Regt., from Enfield, Conn.

2-82nd Earns Master Readiness Award



The Soldiers of the **2nd Bn. "Corsairs," 82nd Avn. Regt.**, received the honor of being the Army Forces Command's 2007 Master Readiness award recipients (active component air assault battalion) for their outstanding effort in maintaining their Black Hawk helicopter fleet. During ceremonies at the Utility Helicopter Conference held Sept. 9 in St. Louis, Mo., the Utility Helicopter Project Manager's Office presented the award to representatives of the UH-60 battalion, based

at Fort Bragg, N.C. The 2-82nd Avn. earned the award during their 2007 deployment to Afghanistan. Also recognized were the **2nd Cbt. Avn. Bde.**, Korea; the **1st CBT**, Fort Hood, Texas; the **1st Sqdn., 230th Air Cav. Regt.**, Tennessee Army National Guard; and the **1st Bn., 189th Avn. Regt.**, Montana ARNG. Pictured here, l to r, are LTC Jayson A. Altieri, Corsair commander, MAJ Jason Arriaga, CW4 David Bowman, SSG Christian Burt and SPC Preston S. Hesselbacher.

FLIGHT SCHOOL GRADUATIONS

The fiscal year 2008 Major, Active competitive category, promotion selection board results were released Aug. 28. AAAA congratulates the following 118 aviation tracked officers.

Seq#	Name
579	Anderson, Spencer M.
707	April, Douglas P.
111	Baldwin, Regan M.
69	Bayle, Richard E.
522	Beavers, Richard V.
542	Belmont, Jonathan T.
135	Berryhill, Joshua P.
460	Block, Richard J.
494	Blow, Craig A.
583	Bonardi, Anthony M.
70	Bousset, Michael
288	Boyer, Del P.
425	Brady, Matthew F.
570	Bustos, Michael J.
323	Cabre, Kevin A.
432	Caine, Murphy A.
427	Cannar, Jennifer L.
190	Clark, Jeremy J.
224	Clover, Stephen L.
744	Clyde, Christopher
775	Cody, Clinton R.
283	Collins, David S.
483	Connolly, Kristina
328	Corwin, Russell M.
362	Coston, Steven M.
360	Coyne, Kevin M.
659	Cullinan, Brendan J.
352	Darnall, Kenneth R.
347	Davis, John Brian L.
526	Dial, Ethan P.
293	Eastman, Steven O.
702	Elias, Jonathan G.
428	Elliott, Aaron C.
121	Entrekin, Michael E.
186	Enyart, Erik A.
583	Fair, Frank J.
4	Fass, Cory D.
558	Fecteau, Brian M.
658	Fischer, James E.
493	Frombach, Matthew F.
267	Gafney, James F.
604	Giordano, Anthony F.
185	Gonzalez-Quinones, M.
326	Halsey, Larry C.
641	Halstrom, Eric E.
674	Harvey, William J.
630	Hatch, Shawn C.
279	Hebert, Ryan R.
456	Hammer, Patrick T.
189	Hopkins, Mark W.
175	Hursey, Don P.
673	Hussey, Thomas L.
123	Jaeger, Timothy R.
461	Jamies, Corey M.
358	Jankowski, Eric M.
483	Jenni, Shoshanna B.
515	Johnson, Cayton L.
223	Johnson, Todd A.
132	Jones, Bryan C.
280	Kakkonen, John J.
429	Kendall, Ryan C.

376	Keown, Adam R.
282	Krump, Nathan P.
125	Landrum, Matthew A.
701	Lane, Connie M.
556	Lang, James M.
535	Lockhart, Dennis O.
38	MacGregor, Kent M.
292	Mariani, Christian
571	Marquis, Kirsten G.
534	Mariotti, Gabriel M.
650	Mastrolanni, Jordan
232	McNull, Christopher
753	McQuown, Glenn C.
368	Mecaglia, Danielle
335	Miller, Mary K.
854	Miller, Michael S.
337	Morgan, David W.
545	Morris, John A.
434	Mundell, Zachary J.
318	Nanes, Joshua A.
439	Nelson, Peter C.
457	Neison, Ryan B.
577	Nix, Cecil C. IV
548	Olsen, Eric M.
527	Palin, Jonathan M.
209	Parisher, Terry W.
316	Perry, David R.
768	Phelps, Jennifer A.
333	Preciado, Carl A.
133	Raus, Eric J.
105	Ream, Theodore P.
286	Rose, Timothy L.
306	Ruisanchez, Joshua
697	Schwenn, Khirsten T.
731	Shaffer, Justin J.
817	Shah, Rizwan A.
416	Sharpe, Sherri L.
241	Shaver, Travis O.
68	Shimerda, Joseph J.
663	Smith, Ronald C.
789	Soper, Joshua B.
431	Stachel, Aaron C.
597	Stewart, Richard A.
626	Stickney, Brian J.
489	Stone, Michael A.
543	Supko, Brian E.
14	Szymanski, David H.
31	Tackaberry, Jonathan
208	Taylor, Travis H.
309	Thomas, Ricky A.
726	Thompson, Mason D.
459	Wainwright, Ryan K.
48	Wilsher, Arlin R. II
504	Wingard, John D.
732	Woody, Bryan T.
322	Yengst, Matthew C.
200	Young, Joy A.

The fiscal year 2008 Major, Active competitive category, promotion selection board results were released Aug. 28. AAAA congratulates the following 20 aviation officers serving in other career fields.

Seq#	Name	CFD
206	Allen, Cornelius L.	AC
380	Baker, Patrick J.	AC
294	Bluman, James E.	AC
782	Bruhl, Joseph G.	46
59	Brunel, Jeremy	AC
204	Cuiver, Lance J.	AC
246	Cushwa, Michael E.	48

410	Dorchak, Richard A.	34
477	Evans, Lee A.	49
331	Kananen, Brant E.	52
299	Kann, Nathan M.	48
120	Morgan, Christopher	48
339	Morris, Louis A.	50
407	Morris, Shane A.	AC
459	Riley, Kevin T.	53
340	Rogowski, Michael P.	48
416	Schmitt, John M.	AC
53	Scott, Lloyd D.	50
234	Syars, John	24
267	Turner, David D.	48

The fiscal year 2008 CW5, Reserve Components, promotion board results were released Aug. 5. AAAA congratulates the following 5 aviation warrant officers.

Baker, Thomas R.
Davis, Scott H.
Rice, Russell R.
Siniche, William R.
Walsh, Michael D.

The fiscal year 2008 CW4, Reserve Components, promotion board results were released Aug. 5. AAAA congratulates the following 30 aviation warrant officers.

Bonilla, Wilfredo R.
Burkart, Douglas S.
Burke, Robert G. Jr.
Colgan, Eric G.
Cotman, Ray D.
Cross, Jeffrey M.
Crump, Stephen M.
Dunote, Thomas J.
Foley, John M.
Gorman, Thomas L.
Griffin, Chad V.
Hickman, Kevin A.
Johnson, Jason J.
Jonas, Jon F.
Kail, William J.
Kean, David R.
Keefer, Jennifer L.
Kidwell, Allen T.
Lockhart, Paul M.
McGhee, Michael D.
McPeak, Barton A.
Nelson, Ronald L. Jr.
Nicolas, Damon J.
Sanagustin, David R.
Shelley, Michael D.
St. Dennis, Jamie G.
Teegarden, James R.
Vandermeyden, Dirk C.
Waterhouse, Scott R.
Youngerman, Daniel S.

The fiscal year 2008 CW3, Reserve Components, promotion board results were released Aug. 5. AAAA congratulates the following 23 aviation warrant officers.

Baker, Charles E.
Blankenship, Jeffrey R.
Bodeker, Anthony P.
Bolivar, Christopher L.
Dillon, Marshall M.
Gabrieli, Douglas J.
Gorney, Curtis R.
Havr, Thomas J.
Hoyer, Matthew J.
Hopkins, Michael R.
Howard, Scott W.

Humphry, Christopher J.
Jaramillo, Jose A.
Jones, Michael D.
Krexelberg, Stephen P.
Li, Lian Zen
McCrumb, David R.
Miller, Stephen D.
Stark, Kenneth A.
Tapparo, Jason A.
Torrez, Kenneth A.
Tran, Brian E.
Zambiasi, Stanley J.

The active Army Fiscal Year 08 Command Sgt. Maj./Sgt. Maj./ Sergeants Major Course selection board results were released Aug. 19. AAAA congratulates the following 57 senior non-commissioned officers.

NAME	PMOS	SEQ#	CSM
Adams, Randolph L.	1525	2	
Akpinar, Necali	15P5		SEL
Alexander, Aaron B.	1525		ALT
Anderson, Crystal L.	15P5	10	
Blair, Patrick A.	15P5		SEL
Bosowski, Christian	1525		SEL
Brewster, Randal D.	1525		SEL
Bryner, Ruth Alva R.	15P5	3	ALT
Carter, Nicolas V.	1525		SEL
Chang, Joseph J.	15P5	4	
Clark, Jon T.	1525	3	
Deanda, Lucio C.	1525		ALT
Delamontoya, Juan	15P5	2	
Duchateau, Antonio	1525	13	
Elliott, William G.	1525	11	
Garcia, Roberto R.	1525		ALT
Greene, Douglas K.	1525		SEL
Hamilton, Thomas D.	15P5		SEL
Hamm, James R.	1525	9	
Hamm, Terry B.	1525	12	
Hauke, Brian N.	1525	14	
Hendricks, John P.	15P5	8	
Hunter, Annette	1525		ALT
Hurst, Zachary H.	1525	15	
Ibsen, David J.	15P5	5	
Jandrich, Edward S.	1525		ALT
Johnson, Timothy S.	1525		ALT
Jones, Shawn L.	15P		ALT
Jordan, Kevin C.	15P5	1	
Jordan, Douglas L.	1525		ALT
Kimble, Dexter L.	15P5	9	
Lee, Trefus E.	1525		SEL
LeMike, Richard B.	1525	4	ALT
Lowrey, Russell S.	15P5	11	
Maslian, Mark K.	1525		SEL
McGaha, William K.	1525	8	
McGraw, Robert B.	15P5	13	
Merrill, Derrick	1525		ALT
Meyer, Phillip J.	15P5	12	
Morris, David E.	15P5	7	
O'Black, Stuart C.	1525		ALT
O'Donnell, Michael P.	1525		ALT
Plattenberg, Harold	1525		ALT

Career Fields
 AC = Acquisition Corps
 24 = Telecommunication Systems
 34 = Strategic Intelligence
 46 = Public Affairs
 48 = Foreign Area Officer
 49 = Opns, Research & System Analysis
 50 = Force Management
 52 = Nuclear and Counterproliferation
 53 = Info Systems Management
 * Below the Zone
 * = AAAA Member
 * = Life Member

Rodriguez, Ernest 15Z5 7
Rubio, Kevin M. 15Z5 SEL
Sicke, Franklin W. 15Z5 5
Snyder, James P. 15Z5 SEL
Soliz, Jose L. 15Z5 ALT
Sparks, Terry L. 15Z5 ALT
Speedo, Jason E. 15Z5 10
Sullivan, Richard I. 15Z5 SEL
Taylor, John E. 15Z5 1
Terry, Maurice L. 15Z5 ALT
Walker, Tonia T. 15P5 SEL
Warner, Jason W. 15Z5 SEL
Williams, Stanley W. 15P5 6
Yeagan, William J. 15Z5 6

The active Army Fiscal Year 08 Sergeant Major Training selection board results were released Aug. 19. AAAA congratulates the following 30 senior non-commissioned officers.

NAME	PMOS
Baker, Lepharis A.	15Z5
Bero, Robert A.	15Z5
Dawson, Tony W.	15P5
Dougherty, Lawrence	15Z5
Garretson, Peter J.	15Z5
Graves, Ronald K.	15P5
Guillen, Raul	15Z5
Johnson, Henry R.	15Z5
Lunsford, Patrick W.	15Z5
Mangiona, Junella	15P5
McCabe, Stephen P.	15Z5
McGrew, Paul W.	15P5
Nutler, Scott E.	15P5
Odum, Steven D.	15Z5
O'Leary, Brian M.	15Z5
Parmer, Robert D.	15Z5
Peckham, Eric S.	15Z5
Puckett, Orury M.	15Z5
Pusey, James N.	15Z5
Sallila, Gerald J.	15Z5
Satele, U'ualegala	15Z5
Schmidt, Stanley T.	15P5
Simmons, Owen H.	15Z5
Sutterfield, Michael	15P5
Thomas, Walter D.	15Z5
Tincher, Noah L.	15Z5
Wade, John F.	15Z5
Waltman, Ronald L.	15Z5
Wrenn, Norris C.	15Z5
Wright, Joseph R.	15Z5

FLIGHT SCHOOL GRADUATIONS

AAAA congratulates the following officers of the Aviation Basic Officer Leadership and Warrant Officer Basic Courses, U.S. Army Aviation Warfighting Center, Fort Rucker, Ala. AAAA provides standard aviator wings to all graduates and sterling silver aviator wings to the distinguished graduates of each flight class.

Class 08-20, 34 Officers, Graduated Aug. 6

ABOLC
LT Anthony W. Carlson DG
LT James A. Collins HG
LT Anthony E. Andrews
LT Joshua D. Bowns
LT Michael Connelly

LT Jennifer L. Falcetto
LT John M. Fargason
LT Jason M. Kowrach
LT Stephen R. Kramer
LT Albert D. Winks

AWOBC

WO1 Zach J. Workman DG
WO1 Aron Cunningham HG
WO1 Michael D. Merrell HG
WO1 Michael J. Fresenburg HG
WO1 Bruce F. Scharbus HG
WO1 James A. Ambrose
WO1 Marcus E. Chambers
WO1 Jose A. Cintron
WO1 Patrick S. Colter
WO1 Richard A. Dealon
WO1 Walter D. Fretwell
WO1 Blake R. Gailey
WO1 Kelly R. Geo
WO1 Venancio Hernandez
WO1 David E. Jones
WO1 Austin C. Martinez
WO1 Walter J. Mungus
WO1 Allan W. Moody
WO1 Jesse D. Olson
WO1 Brian J. Reid
WO1 Joshua M. Reynolds
WO1 Jay Ryan H. Robinson
WO1 Nicholas S. Wise
CW2 Austin J. Wood

Class 08-21, 53 Officers, Graduated Aug. 20

ABOLC

LT Gary A. Mullendore DG
LT Joseph A. Burke HG
LT Todd F. Bonner HG
LT Joshua C. Aronson
LT Tyler J. Burkhison
LT Daniel K. Carpenter
LT Sara V. Falconer
LT John A. Keulmann
LT Michael A. Krivensky
LT Aaron N. Krupp
LT Jonathan P. Lackamp
LT Voley J. Marlin
LT Kirby T. Smith
CPT Alicia R. Stahlborg
LT Evelyn Velasquez

AWOBC

WO1 Michael R. Arns DG
WO1 James W. Baker HG
WO1 James M. Jackson HG
WO1 Guy J. Clouse HG
WO1 Thomas McNamara HG
WO1 Toby J. Fainilo CLG
WO1 Ivan Senterik CLG
WO1 Kibeet Chellim CLG
WO1 Juan D. Alvarez
WO1 Daniel J. Bucknam
WO1 Jason N. Butts
WO1 Antonio Covino
WO1 Joseph L. Duke
WO1 Jason G. England
WO1 Brandon K. Gains
WO1 Glen W. Geiser
WO1 Corey A. Hazelwood
WO1 Keith J. Hudson
WO1 Shane R. Hudson
WO1 Matthew L. Ingmire
WO1 Stephen C. Klein

WO1 Jeffery D. Klingler
WO1 Doena D. Koon
CW2 Jacob T. Kodel
WO1 Charles J. Lamb
WO1 Justin G. Leach
WO1 Eric S. McAfee
WO1 Joseph E. Milner
WO1 Brandon N. Moat
WO1 Dans A. Orr
WO1 Timothy D. Payne
WO1 John R. Radford
WO1 Daniel R. Reinhardt
WO1 Jason W. Smith
WO1 Jason M. Snoyman
WO1 Jeffery M. Stine
WO1 Joshua T. Wesner
WO1 Matthew S. Zaiher

Class 08-22, 34 Officers, Graduated Sept. 6

ABOLC

2LT Joseph H. Yurisich
CPT Benjamin M. Carter
CPT David W. Carter
1LT Zachary F. DeGroot
MAJ Yantzee R. Hintz
2LT Christopher K. Lackey
2LT Justin P. Roederer
2LT Adriana J. Silva
1LT Clark V. Theodore
LT Andrew T. Wilson

AWOBC

WO1 Michael S. Krajnik
WO1 Dean R. Merkins
WO1 Christopher W. Shary
WO1 Michael G. Anderson
WO1 Robert J. Coughlin
WO1 Jeremy W. Assmus
WO1 Isaac W. Barnhart
WO1 Wyatt T. Blanchett
WO1 David W. Bussell
WO1 Thomas R. DeVaney
WO1 Bradley C. Haase
WO1 Brett A. Mathews
WO1 Jacob D. Murphy
WO1 Ciorra J. Peterson
WO1 Scott J. Quiros
WO1 Eric L. Riedel
WO1 Scott S. Roberts
WO1 Scott M. Roney
WO1 Daniel D. Solph
WO1 James A. Steward
WO1 Eusebio O. Torres
WO1 Frederick L. Torres
WO1 James M. Vinson
WO1 Joseph C. Wankelman

Class 08-23, 55 Officers, Graduated Sept. 18

ABOLC

LT Colin M. Satler DG
LT Robert J. Briggs HG
LT Jeremy E. Caldwell HG
LT Jordan O. Rubin HG
LT Andrew M. Bartlett
LT Theresa M. Dickson
CPT Randal C. Glasgow
LT Robert H. Gunderson
LT Matthew D. Hoff
LT James M. Honour
LT Garvis B. Joyner
LT William J. Keller
LT Joseph C. Moen
LT Roy S. Morris
LT Ben A. Ramos
LT Mitchell J. Sanik
LT Samuel J. Scallan
LT Corey W. Smith
LT Ryan P. Sweeney

LT David C. Tess
LT Christopher L. Woodcock

AWOBC

WO1 Thomas R. Young DG
WO1 Clarke A. MacKenzie HG
WO1 Patrick J. Bell HG
WO1 Ryan P. Boehrer HG
WO1 Gary Angarita HG
WO1 Eric C. Wells CLG
WO1 Christopher J. Gruninger CLG
WO1 Jonathan R. Atchshire
WO1 Dustin M. Aultman
WO1 Jason J. Boston
WO1 Michael B. Breaux
WO1 Ryan A. Dibattiste
WO1 Jeremy S. Drake
WO1 Kenneth S. Dudley
WO1 Forest T. Eagle
WO1 Timothy A. Forstall
WO1 William L. Gerhardt
WO1 Michael J. Guerra
WO1 Jason R. Hickman
WO1 Henry H. Kaawa'oa
WO1 William J. Letunic
WO1 Curtis J. Lynn
WO1 Gabriel I. Marin
WO1 Christopher D. Neal
WO1 Jason L. Norman
WO1 Alexander J. Peake
WO1 Felipe J. Rubalcava
WO1 Peter A. Sarvis
WO1 Cole A. Sisson
WO1 Mark W. Sluss
WO1 George C. Summers
WO1 Joseph D. Wicenczek
WO1 Toby W. Williamson
WO1 James O. Wollam

UAS OPERATOR GRADUATIONS

AAAA congratulates the following graduates of the Shadow 200 (RQ-7B) Unmanned Aircraft System Operator Course, MOS 35K/15W, Fort Huachuca, Ariz.

Class 08-07 Graduated Aug. 7

SGT John G. Maldonado
SPC Timothy C. Gillilan
SPC Craig S. Sanchez
SPC Joshua D. Thomas
PFC James A. Lehnert
PFC Daniel R. Phillips
PFC Phillip B. Oskander
PV2 Jeffrey A. Clapp
PV2 Michael W. Cook Jr.
LCpl Kevin A. Bandoske (USMC)
LCpl Daniel J. Currin (USMC)

Class 08-565 Graduated Aug. 7

PV2 Ryan S. Bordin HG
SGT Timothy A. Twait
SPC Philip B. Briggs
PFC Teddy R. Bennett
PFC Steven A. Jengwatana
PFC Mitchell R. Moore
PV2 Kyle R. Davis
PV2 Kelly L. Faddis
PVT Shea D. Eden

* = AAAA Member

+ = Life Member

DG = Distinguished Graduate

HG = Honor Graduate

CLG = Commandant's List Graduate

NEW AAAAORDER OF ST. MICHAEL RECIPIENTS



GOLD

Frank N. Piasecki*
BG Rickey L. Rife
GEN Edward C. "Shy" Meyer
COL Curtis J. Herrick Jr., Ret.

SILVER

CSM Herbert W. McCoy
COL Theresa L. Barton
COL Eric M. Nelson
CW5 David S. Lumley
LTC David A. Lum, Ret.
COL Mark W. Hayes
COL Michael R. Hadley
CW4 Robert J. Brown, Jr.
COL Samuel S. Evans
COL Timothy C. Kelly, Ret.
COL Bruce A. Wilhelm
Larry C. Woodrum
BG Alberto J. Jimenez
COL Lee D. LeBlanc
LTC Joel J. Slagle
LTC Bruce J. Tufte

BRONZE

MAJ William Kenneth Fiedler
Lewis James "Jim" Grastie
MAJ Stephanie Batten
SPC Joseph Glover
COL Christopher T. Eaker
CW5 Ronald Claypool
CPT Lowell M. Goldman
MAJ Mark G. Kappelman
CW5 Charles W. Lent
Barbara Clark
DAC Clarence E. Rash
ISG Troy S. Hubbs

*Awarded posthumously

LTC Ronald G. Meyers
ISG James R. Adriance
Mrs. Arlene M. Anderson
CW4 Stuart G. Hartwell
MAJ Marcus Hay
CW4 Glen Barto
CW4 Collis Druley
CW4 Ron Green
CW4 Scott Tedder
CW3 Charles Trilone
SSG Harold Suzanne
Oliver Bonner
Dan Taylor
Ken Walton
Chuck (William) Ogle
Anthony Mance
LTC Keith Hirschman
LTC Scott Bosse
COL Mike Switzer
Chauncey Jackson
CW4 David A. Ford
LTC Christian E. Rush
Dick (Richard) Ordway
LtCol Michael Dahl
Henrietta Maples
CW4 James P. Brennan
COL Philip K. Miller
COL John E. Valentine
CW3 Scott Foster
CPT James Gafney
CW4 Karl McKenzie
CW5 Frank Rotella
CW4 Dave Carpenter
CW4 Robert Murphy
CW5 Jeff Borges
CW4 Michael Slebodnik
ISG Michael German
CSM Mark Lindsey
ISG William L. Platt

ISG Charles C. Dees
ISG Jon A. Martin
ISG Luis H. Rodriguez
LTC Bryan J. Hoff
CW4 Keith Langewisch
ISG Todd W. Venema
MSG Anthony J. Farinosi
CW3 Darrin S. Ingram
SFC Shawn Butler
ISG Willie Austin
CPT Melissa C. Comiskey
John R. Penman
CSM Bruce R. Hendry
LTC Travis C. Richards
CW5 Jose Perales
LTC John M. Till
CW5 Dennis E. Dura
CW4 Brian L. Michael
COL Rick D. Hall
CW2 Derek W. Ward
LTC Timothy P. Healy

SOLDIER OF THE MONTH

SSG Grant Graham
August 2008
Bavarian Chapter
SPC James Haggerty
September 2008
Bavarian Chapter
SPC Heather J. Harvey
June 2008
Bluegrass Chapter
SGT Melvin Williams
August 2008
Empire Chapter
SSG Daniel J. Herley
September 2008
Empire Chapter

SGT Aisa E. Trevino
June 2008
Jimmy Doolittle Chapter
SGT Joshua B. Orr
July 2008
Jimmy Doolittle Chapter
SGT Michael S. Hamilton
August 2008
New Orleans/Voodoo Chapter

NCO OF THE MONTH

SGT Marcus C. May
4th Quarter 2008
Aviation Center Chapter

SOLDIER OF THE QUARTER

PFC Anabel Cepero
4th Quarter 2008
Aviation Center Chapter

DISTINGUISHED INSTRUCTOR OF THE MONTH

SSG Jonathan L. Morrison
July-September 2008
Colonial Virginia Chapter
Alvin L. Brittingham
July-September 2008
Colonial Virginia Chapter

NEW INDUSTRY PARTNERS

Marvel Manufacturing
Company

IN MEMORIAM

SPC Richard P. Jones, Ret.
CW4 Bobby G. Bruce, Ret.

CHAPTER NEWS

Tennessee Valley Chapter



The TVC proudly announces that its two 2008 Aviation Challenge Scholarship winners have both graduated from the 8-day "Mach II" Space Camp at the U.S. Space and Rocket Center in Huntsville, Ala. **William "Will" Hurst**, call sign "Squirrel", graduated June 13; and **Tyler Tippie**, call sign "Hot Dog" graduated July 25 from the realistic and challenging course which included the use of simulations to learn air fighter tactics, search and rescue skills, aerodynamics, flight physiology, and air combat history. Above left, William "Bill" Hurst and young Will Hurst with TVC V.P. for Scholarships retired LTC William Weaver. Above right, Tyler Tippie with his sister Jaclyn.

Connecticut Chapter



CC Senior V.P. Charles Brady presented **Maria Hanna**, president of Survival Systems USA, Inc., with a certificate of appreciation March 25 at Survival Systems in Groton, Conn. Hanna was recognized for continued outstanding support of the Army Aviation community and the local chapter. Hanna's company produces training systems for conducting aircraft ditching and water survival (dunker) courses.

NEW MEMBERS

Air Assault Chapter

CW4 Chris A. Johnson
SGT Jeanine Mezei
WO1 Alexander Rivera

Arizona Chapter

Taffee E. Cardenas

Aviation Center Chapter

WO1 Keal S. Bockelman
WO1 Richard C. Dean
WO1 Scott E. Dozier
WO1 Taylor P. Edwards
WO1 Ronald B. Hatchen
WO1 James A. Hethcox
2LT Luke G. Jaeger
SGT Melissa Lacey
WO1 Andrew J. Lam
WO1 James K. LeGrand
2LT Matthew Mikos
WO1 Michael S. Pastelak
2LT Ernest A. Poe
2LT Jarred Rickey
WO1 Jonathan E. Rovey
2LT Brett D. Slaughter
WO1 Gregory R. Turner
2LT Daniel E. Waters
Lillian B. Wilson
SSG Clint B. Young

Bavarian Chapter

SSG Grant Graham

Big Red One Chapter

COL Walter H. Frederick III, Ret.

Bluegrass Chapter

CW2 Scott D. McCauley
CSM John E. Taylor, Ret.
Central Florida Chapter
Mike J. Morin

John D. Rowe
LTC William R. Szymanski, Ret.
Wes Woodruff

Colonial Virginia Chapter

SSG Todd M. Becker
CPT Adam W. Korinek
CW5 Anthony C. Lynch
SFC Luis R. Rodriguez
SGT Thomas W. Stulginski
SGM Minh D. Sutton

Connecticut Chapter

Kenneth E. Leili
Corpus Christi Chapter
SSG Dennis L. Bender, Ret.
Catherine E. Lopez

Cowboy Chapter

SSG Bowen D. Brannmeier
MSG David L. Franck
SFC Darwin D. Kramer
CW2 Joseph B. Stanfill

Delaware Valley Chapter

LTC Barry R. Billmand, Ret.
Kevin C. Billmann
Tom D. Bishop
Diane E. Cannon
Thomas M. Cavanaugh
John M. Cpioll
Ralph B. D'lorio
Anthony D. Diorisio
Joshua Ellison
Eric D. Esposito
Kevin J. McShane
Clinton E. Palmer
William R. Reis
Michael J. Rolecki
Richard M. Savastana

Eric D. Soring

Ray Sunday

Fred L. Troilo

Greater Atlanta Chapter

CW4 Mario Gabriel Jr. Ret.
Frank E. Plasecki
CW4 Joel C. Smith
Leon Sumlin

Idaho Snake River Chapter

1SG Bryan G. Castro

CW3 David L. Guzzetti

MSG Terry W. Page

Iron Mike Chapter

1SG Rickey A. Davis

Jack H. Dibrell/Alamo Chapter

Lt. Col. Dale E. Sherrod, Ret.

Jimmy Doolittle Chapter

SGT Aisa E. Trevino

MacArthur Chapter

Neil M. Hoheiser

Monmouth Chapter

Andrew Algava

Lt. Col. Richard M. Gaudio, Ret.

Mount Rainier Chapter

CW2 Rosa M. Alvarez

Shana M. Markstrom

North Star Chapter

SFC Stacey M. Haak

North Texas Chapter

SSG Robert D. Flickinger

Northern Lights Chapter

WO1 John T. Carrico

Old Tucson Chapter

WO1 Jeremy J. Christopher

CW4 Michael A. Overleas

Rio Grande Chapter

CW3 Robert E. Canfield

CSM Carlos A. Lewis

ShowMe Chapter

WO1 Jared M. Hall

Southern California Chapter

SFC Robert H. Wood

Tennessee Valley Chapter

1LT Ronnie D. Hawkins, Ret.

LTC Daniel M. Munoz, Ret.

Utah Chapter

SSG Wuolukka A. Frank

2LT Adam C. Sherman

Volunteer Chapter

WO1 Daniel V. Gruenke

Voodoo Chapter

SGT Michael S. Hamilton

SGT Thomas M. Stoker

Washington-Potomac Chapter

CPT Charles R. Brundrett Jr.

Mr. Paul Glenshaw

CW3 William J. Hamilton

CW2 Brian M. Imwold

Wright Brothers Chapter

Mr. Charles F. Hatfield

CW4 Rick M. Morello

Robbie Robinson

Rev. Mark D. Scheidegger

No Chapter Affiliation

CW3 Russell N. Bourgoynne, Ret.

MAJ Theodore J. Karklins, Ret.

LTC Donald M. Mulder, Ret.

CW2 Guinevere R. Pherson

WO1 Joseph S. Tatem

SPC Eric H. Towle

WO1 William J. Vanek

MAJ Eric P. Vetro

Bluegrass Chapter



BGC President COL Benjamin F. Adams III presented chapter certificates of appreciation to **Paul C. "Chris" Baker** during their general membership meeting Sept. 12 in Frankfort, Ky. Baker, a managing partner of the local O'Charley's restaurant, was recognized as the newest sustaining member of the Bluegrass Chapter and AAAA. O'Charley's helps support the BGC by providing gratis use of rooms for the activities throughout the week.

National Executive Board



When retired **MG Ben Harrison** turned 80 years young on July 23, slowing down was not on his mind. Harrison, a past national AAAA president and Chairman of the Army Aviation Hall of Fame, who has been flying for over 50 years, took to his Maule MT-7-235 fixed wing aircraft for a couple of passes over Draughon-Miller Central Texas Regional Airport to join the ranks of the United Flying Octogenarians. Taking off and landing safely is part of the process to become a UFO. Harrison, who resides in Belton, is now part of an international non-profit organization which boasts over 600 members since its 1982 start. Here, Harrison, in his Cav. Stetson, is joined by his son Ben Harrison III on the qualifying flight.

FY 2009 NDAA IN CONTINUING RESOLUTION

On Sept. 30, President George W. Bush signed a \$634 billion continuing resolution for the funding of the government into fiscal year 2009 with 10 appropriations at a 2008 spending rate until March 6 and 3 approved for the full year.

The approved appropriations provide \$487.7B for the National Defense Authorization Act, \$72.9B for military construction and to the Department of Veterans Affairs, and \$39.9B for the Department of Homeland Security.

A \$162B defense supplemental budget was approved in June that is to carry DOD forward until the next elected administration can set war policies in the spring. The NDAA includes activities for the DOD, military construction, the defense activities in the Department of Energy, to prescribe military strengths for the fiscal year, and for other purposes.

Although Congress began the 2009 Defense Appropriations process in an orderly manner with the delivery of the House bill to the Senate June 3, the Democratic Party with a 1-vote majority in the Senate delayed action to avoid debate and allowing amendments.

Over shadowed by the national financial bailout legislation activities, the Senate acted abruptly in mid-September to comply with the law to send the NDAA to the president before the end of September and closed the introduction of 101 amendments to avoid debate addressing the more than \$6.6B for 2,300 earmarks embedded in the bill.

As a result, a third of the defense amendments that would have better supported service members, dependents, retirees and veterans, approved by Senate subcommittees and supported by The Military Coalition, are not in the 2009 NDAA.

On Sept. 23, TMC – to support achieving a better NDAA after comparing the House and Senate versions of the bill – provided recommendations in testimony to the joint conference committee to consider in final deliberations. The TMC is already working with Congress to maintain momentum and to have the lost amendments reapproved for inclusion in the 2010 NDAA.

WAR TROOP DISPOSITIONS CHANGE

On Sept. 9, President Bush, after consultation with his war commanders and the Joint Chiefs of Staff, announced there will be major troop adjustments through the end of 2008.

In response to the success of the coalition surge operations in Iraq, an Army brigade force of 8,000 troops will be withdrawn from Iraq and not replaced during the next 4 months, leaving the in-country strength at 146,000 to support operations.

In response to combined Taliban and Al Qaeda and other terrorist force actions, a Marine battalion force of 500 to 1,500 troops will deploy to Afghanistan in November instead of Iraq, and an Army brigade of up to 5,000 will be sent in January.

More NATO support has been requested to supplement the gains from 21,000 to 31,000 troops in the last two years.

Defense Secretary Robert Gates and Joint Chiefs of Staff Chairman Adm. Michael Mullen strongly stressed greater efforts are needed by



LEGISLATIVE REPORT

COL Curtis J. Herrick (Ret.)

AAAA Representative to The Military Coalition (TMC)

U.S. civilian agencies and the international community to fill out the provincial reconstruction teams to work with our military and to enhance the progress of the Afghan government.

SOLE SURVIVOR BENEFITS ACT APPROVED

President Bush signed the "Hubbard Act" Aug. 29, in the presence of the Hubbard family, to ensure that over 50 veterans discharged early as sole survivors since 9/11 and future sole service survivors are entitled to the same benefits as other honorably discharged service members.

Marine Lance Cpl. Jason Hubbard, after losing a second brother in the Iraq War, was given a sole service survivor discharge, but was later requested to repay his enlistment bonus and denied other benefits because of his early discharge. Upon learning of this situation, California Congressmen Devin Davis and James Costa reacted quickly and gained approval of the bill.

NATIONAL GUARD FOUR-STAR APPROVED BY SENATE

On Oct. 3 the Senate approved the presidential nomination of LTG Craig McKinley, the director of the Air National Guard, for promotion to general and assignment as the National Guard Bureau chief, the first four-star general to lead the NGB.

VA HOME LOANS INCREASE

President Bush signed the Housing and Economic Recovery Act of 2008 on July 24 authorizing the Department of Veterans Affairs to use a locality-based approach in raising the cap on its "no-down-payment" home loans from \$417,000 to \$729,000. The new law raises the VA's Specially Adapted Housing Program primary grants from \$50,000 to \$60,000 on construction of a new home or modifying an existing home to meet the adaptive needs of veterans and active duty members with service connected disabilities.

10TH QRMV COMPLETE

The 10th Quadrennial Review of Military Compensation was completed in July with the delivery of Volume II to the Defense Department. The review of the military compensation system package of cash, deferred and noncash benefits was conducted with the themes of choice for the member, flexibility for the uniformed services and reducing DOD costs. The key findings and recommendations made in the areas of military retirement, health care and quality of life programs, if adopted, will markedly enhance military life as we know it.

The results of the review of the recent QRMV recommendations are expected to surface with

the next administration and the 111th Congress.

Key recommendations include:

- Convert to a civilian-style retirement system under which full retirement pay will begin in the 57-60 age period.
- Vest retirement benefits after 10 years of service.
- Use flexible "pay gates" and separation pay at certain points of service to encourage the retention or the departure of personnel.

The AAAA and TMC have advocated these recommendations:

- Establish pre-tax flexible spending accounts for healthcare and dependent out of pocket expenses.
- Eliminate deductibles and co-pays for preventive care services.
- Create incentive programs to attract and retain health professionals to meet care needs.

TRICARE NEWS

Army Echoes reported that more civilian TRICARE providers are now accepting new patients. DOD is lowering the TRICARE retail pharmacy brand-name drug costs by 25 percent with the application of a 2008 NDAA provision which requires commercial outlets to apply negotiated federal drug discounts.

ARMY RESPONDS TO SUICIDE RATES

The Army's suicide rate, which has increased from 9.8 to 18.1 suicides per 100,000 in the last 5 years, is just below the rate for a likely civilian group of 19.5 per 100,000. The leading factors believed to be behind Soldier suicides are: troubled personal relationships; legal, financial and work problems; repeated deployments and longer tours in Afghanistan and Iraq.

LTG Eric B. Schoomaker, Army surgeon general, has redoubled prevention efforts and looked outside for new models, especially the Air Force, which has successfully encouraged support systems to prevent suicides.

The Army's program includes removing the stigma from asking for help, encouraging Soldiers to look after each other, and ACE – an "ask, care and escort" campaign.

VETERAN CARE COSTS AT ALL TIME HIGH

The government is spending more on veterans care than at any time in the past, \$82B in 2007 vs. \$81B adjusted for 1947. The rising costs of health care, caring for aging veterans, and treating severely wounded troops from Iraq and Afghanistan contribute to the increase.

About 350,000 of the some 1.6M service members who have served in Iraq and Afghanistan are using the VA. A total of 5.5M veterans are now receiving VA health care and 2.9M are collecting compensation.

FALLEN HEROES

AAAA is saddened to announce the loss of the following Soldiers with Aviation units serving in support of the global war on terrorism.



SSG Nguyen

Homeland Defense

The 82nd Airborne Division is investigating the cause of the death of **SSG Huy Quoc Nguyen**, 44, of Inglewood, Calif., who died Sept. 5 after collapsing during morning physical training at Fort Bragg, N.C. Nguyen was a CH-47 Chinook flight engineer with Co. B, 3rd Bn., 82nd Avn. Regt. He had recently joined the 82nd Cbt. Avn. Bde. in early September.



1LT Vallejo



CW3 Rudolf



CW2 Edwards



CW4 Slobodnik

Operation Enduring Freedom

CW4 Michael Slobodnik, 39, of Gibsonia, Pa., died Sept. 11 at Bagram Airfield, Afghanistan, from wounds suffered when his OH-58D Kiowa Warrior aircraft he was flying received enemy small arms fire near Forward Operating Base Nagil. Slobodnik was assigned to the Co. C, 2nd Bn., 17th Cav. Regt., 101st Cbt. Avn. Bde., Fort Campbell, Ky. He had served five tours in Iraq and began his only OEF tour in January. Burial will be in Arlington National Cemetery.



SGM Ordonez



SSG Mason



SGT Eshbaugh

Operation Iraqi Freedom

An Army National Guard CH-47D Chinook helicopter, deployed with the 36th Cbt. Avn. Bde., crashed about 12:01 a.m. Sept. 18 near Tallil Airbase (Camp Adder) in southern Iraq, killing all seven Soldiers aboard. The aircraft was one of a four helicopter serial flying from Kuwait to Balad when the incident occurred. According to military sources, hostile fire was ruled out and mechanical failure is suspected. The Soldiers were assigned to units of the 2nd Bn., 149th Avn. Regt., based in Grand Prairie, Texas and in Lexington, Okla.

Killed were:

1LT Robert Vallejo II, 28, of Richland Hills, Texas, with Co. B.

CW3 Brady Joe Rudolf, 37, of Oklahoma City, Okla., with Det. 1, Co. B.

CW2* Corry Ardel Edwards, 38, of Kennedale, Texas, with Co. D.
SGM* Julio Cesar Ordonez, 54, of San Antonio, Texas, with Co. B.
SSG* Anthony Luke Mason, 37, of Springtown, Texas, with Co. B.
SGT Daniel Michael Eshbaugh, 43, of Norman, Okla., with Det. 1, Co. B.
CPL Michael Eyre Thompson, 23, of Harrah, Okla., with Det. 1, Co. B.

The other three aircraft and personnel aboard were unharmed. The cause of the incident is under investigation.



CPL Thompson

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

No MOS Qualification for Former Marine Helo Repairer

Dear ARMY AVIATION:

I'm an Army National Guard flight platoon sergeant in a security & support aviation battalion and a technician with an aviation support flight facility.

During my time in the active Army, the Reserve and the Guard, I have enjoyed a very fulfilling career. I have strived to find a balance between the needs of the Army and those of my Soldiers.

Normally that balance is fairly easy to achieve and it has benefited all involved most of the time. But recently, I have encountered a distressing trend that I find difficult to understand or justify to my troops.

This is an apparent across-the-board practice of rejecting civilian acquired skills (CAS) when awarding military occupational skills (MOS). As an example: I have a Soldier in my platoon who served 5 years as a Marine sheet metal & hydraulic repairer on CH-46E Sea Knight helos. Now recruited as a 15V scout-observation helicopter repairer, this smart, young and fully qualified serviceman – so says the Army Technician Program – cannot get promoted or attend his annual training because he is not "MOS qualified."

Having worked with this Soldier and seen the work that he does, it is totally and completely beyond my comprehension why he has been turned down for the MOS that he is imminently qualified to perform.

Why does the Army have a CAS program and books showing MOS equivalency to recruits if they refuse to abide by them and use them? What am I missing?

Sincerely,
 A Concerned Guardsman (Name Withheld on Request)



DEAR
 ARMY AVIATION
 MAILBOX

ORDER OF ST. MICHAEL and OUR LADY OF LORETO AWARDS

Phantom Corps Chapter



PHOTO BY SHERMAN FOGLE

Retiring **CW5 Kenneth Cline** was honored with the Legion of Merit and presentation of the Silver medallion of the Order of St. Michael June 20 at Fort Hood, Texas. Robert Strange, deputy director of the Aviation Test Directorate, Army Operational Test Command, presented the awards to Cline in recognition of his 27 years of outstanding service. Cline, an operational test officer with ATD, amassed over 5,500 hours of both fixed and rotary wing flight time, to include 475 combat hours during his career. Cline plans to serve next as a flight simulator instructor at Fort Hood.

Phantom Corps Chapter



PHOTO BY SHERMAN FOGLE

On the occasion of his retirement after 35 years of military and civil service, **George Van Riper** was honored with the presentation of the Silver medallion of the Order of St. Michael June 20 at Fort Hood, Texas. Robert Strange, deputy director of the Aviation Test Directorate, Army Operational Test Command, presented the awards to Van Riper, an operational test officer with the command. A veteran of the Vietnam War, he amassed 350 combat hours and seven Air Medals for bravery. As a test officer, Van Riper was directly responsible for the successful planning and execution of the initial operational testing of the aviation combined arms tactical trainer, common missile warning system, combat survivor evader locator, Air Warrior system, CH47F, UH-60M, UH-72A and other systems during his career. He plans to do volunteer work with the city of Harker Heights in retirement.

Aviation Center Chapter



PHOTO BY KAM LEBNER

BG William Forrester, commanding general of the Army's Combat Readiness/Safety Center, presented the Meritorious Service Medal and inducted **CW4 William Rains** into the Order of St. Michael during a retirement ceremony July 15 at Fort Rucker, Ala. Rains, an aviation accident investigator with the CRC, was presented with the Bronze medallion for his contributions to aviation as he retires after 20 years of service – including a tour in Iraq to investigate aircraft incidents on behalf of the CRC. Rains will next serve as an aviation safety officer with the Army Material Command in Huntsville, Ala.

Aviation Center Chapter



PHOTO BY KAM LEBNER

COL Anthony Sabb was honored with the Legion of Merit and the Bronze medallion of the Order of St. Michael during his Aug. 8 retirement ceremony at Fort Rucker, Ala. BG William Forrester, commanding general of the Army's Combat Readiness/Safety Center, made the presentations to Sabb, his executive director for Current Operations. Sabb distinguished himself during a 25 year career, including command of the 4th Bn., 101st Avn. Regt. in combat. He deployed his battalion in support of Operation Iraqi Freedom during the initial phase in which his unit conducted the first air assault mission of 101st Soldiers into Iraq, covering a record-setting distance of over 385 kilometers. He also deployed the first UH-60 company in support of Operation Anaconda in Afghanistan. Sabb is on a second career in defense contracting, living with his family in Wetumpka, Ala.

Aviation Center Chapter



ARMY PHOTO

Aviation Branch Chief BG James O. Barclay III presented **CW5 David S. Lumley** with the Silver medallion of the Order of St. Michael Aug. 27 at Fort Rucker, Ala. Lumley served as the director of the Aviation Branch Safety Office under the Army Aviation Center of Excellence and retires after 28 years of service to the nation. During his career, he worked diligently to ensure the safety of aviation Soldiers whether in the cockpit, working on airfields or driving on the highways. Lumley is pursuing a career next as the safety manager for the U.S. Army Cadet Command at Fort Monroe, Va.

Aviation Center Chapter



ARMY PHOTO BY KAM LEBNER

CW5 Randall G. Gant, the outgoing chief warrant officer of the Aviation Branch, was honored with induction into the Order of St. Michael during a farewell ceremony Aug. 11 at Fort Rucker, Ala. BG James O. Barclay III, commanding general of the Army Aviation Center of Excellence and Fort Rucker, presented Gant with the Bronze medallion for his outstanding contributions as the 3rd CWOB. Gant's far-reaching initiatives and efforts on behalf of the branch and the warrant officer corps will serve as the bedrock for the future success of Aviation for years to come. He is once again a "Night Stalker" with the 160th Special Operations Avn. Regt. at Fort Campbell, Ky.

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

Aloha Chapter



PHOTO BY MICHAEL REARDON

The Silver medallion of the Order of St. Michael was award to retiring **CW5 Bruce W. Blackstone** during a July 1 ceremony at Hickam Air Force Base, Hawaii. MAJ Winfield Adkins, commander of the U.S. Army Priority Air Transport - Pacific Flight Detachment, recognized Blackstone's 23-year career of aviation service to the nation. Blackstone, (a standardization instructor pilot with USAPAT-PFD), has flown over 7,500 hours in OV-10 Mohawk, RC-12D Guardrail, Beech 1900J, UC-35A/B, Gulfstream IV and V, and UH-1 platforms without incident. A veteran of Operations Desert Storm, Iraqi Freedom and Enduring Freedom, Blackstone has helped train hundreds of Army aviators to effectively and safely fly aircraft in all types of environments in peace and combat. He is seeking employment with commercial or corporate aviation in retirement.

Bluegrass Chapter



PHOTO BY CARI DEAN E. STODOLSKI

BGC President COL Benjamin F. Adams III, with the assistance of Mrs. Brenda Miller (right), inducted **COL Phillip K. Miller** into the Honorable Order of St. Michael during a Sept. 1 general membership meeting in Frankfort, Ky. Miller, the public affairs officer for the Kentucky National Guard, was presented with the Bronze medallion for his long and continuous support of Army aviation. He served as a UH-1 and UH-60 crew chief for some 16 years before accepting his commission. Miller has been a champion of the Aviation branch and was the first to volunteer as the inaugural vice president of Awards for the newly formed Bluegrass Chapter.

Big Red One Chapter



PHOTO BY SGT JESUS L. SANCHEZ

The senior leaders of the 2nd Bn., 291st Avn. Regt., LTC Arlis Hummel (right) and SGM Roderick B. Wilkins, inducted retired **CW3 Daryl L. Snell** into the Honorable Order of St. Michael and presented him with the Bronze medallion Aug. 1 at Fort Sill, Okla. Snell was the battalion aviation safety officer and a senior unit trainer and aviation safety observer-controller for the 2-291st Avn. at Fort Riley, Kan. before his retirement. He was honored for his 21 years of superior contributions to Army aviation, including helping to train over 4,000 mobilizing National Guard and Reserve Soldiers to support the Global War on Terror. Snell plans to take it easy and work on his ranch down the road in Bristow.

Connecticut Chapter



PHOTO BY JESSICA WICKZON

CC President Doug Shidler, right, assisted by CC Senior VP Charles Brady, inducted **Norma D. Nardozi** into the Honorable Order of Our Lady of Loreto during the chapter's spring golf tournament April 22 in Stratford, Conn. Nardozi, who is an executive secretary with the Sikorsky aircraft company and also serves as the CC's treasurer, was honored for her outstanding support of the Army aviation community and the local chapter with the presentation of the OLL certificate and lapel pin.

Leavenworth Chapter (Deployed)



PHOTO BY SGT LORI L. JENSEN

GEN David H. Petraeus, commander of the Multi-national Force-Iraq, presented the Bronze Star and the Bronze medallion of the Order of St. Michael to **LTC Everett S. Spain** July 16 in Baghdad, Iraq. Spain served as Petraeus's aide de camp from Feb. 2007 to Sept. 2008, and as his air mission commander - ensuring that all of the general's aircraft were ready for flight and communications were operational. He flawlessly planned and coordinated over 200 critical fixed and rotary-wing combat missions for the MNF-I commander. Spain is now serving in a White House fellowship in Washington, D.C. Here Petraeus gives a "thumbs-up" to Spain.

Corpus Christi Chapter



PHOTO BY JESSICA WICKZON

CCC President COL Joe D. Dunaway inducted **William H. Pearson II** into the Order of St. Michael during a retirement ceremony July 29 at the Corpus Christi Army Depot, Texas. Pearson, honored with the Bronze medallion, served as the CCAD director of Quality Assurance. He led his team in ensuring the depot met compliance with all quality standards to earn Aerospace Standards 9100 and Aerospace Standards 9110 certifications, and ensured follow-up audits still showed compliance with standards depot-wide. Pearson has moved back home to Oklahoma, fishing, relaxing and working around his dad's farm.



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Corpus Christi Chapter



Retired **COL William B. Woodson**, who is retiring from civil service, was honored with induction into the Order of St. Michael June 27 at the Corpus Christi Army Depot, Texas. CCC President **COL Joe Dunaway**, assisted by Mrs. Linda Woodson, presented Woodson with the Bronze medallion. Woodson, a master aviator with over 4,000 flight hours and a Vietnam veteran with 1,000 combat flight hours, served 22 years with the Army. He steps down as the senior engineer with the Aviation Engineering Division in CCAD's Aviation Readiness Development and Research Maintenance Directorate. There he wrote over 1,200 maintenance engineering calls supporting units in all 50 states, Germany and Southwest Asia. A true supporter of Army aviation, Woodson plans to enjoy it as an official retiree.

Greater Atlanta Chapter



A GAC member preparing for a 6 month deployment to Iraq prior to his scheduled retirement was honored with induction into the Order of St. Michael and awarded the Bronze medallion. LTC Robert Singler, operations officer for the 244th Avn. Bde., made the presentation to **CW5 Fredrick D. Bailey** Aug. 8 at Fort Sheridan, Ill. Bailey, who's serving as a tactical operations officer and a standardization instructor pilot with the 244th AB (USAR), plans to retire on his return after 39 years and 9 months of aviation service with the Army. During his career, Bailey flew missions in support of operations in Vietnam, Haiti, Bosnia, Kosovo, Kuwait and Afghanistan. Bailey plans to continue flying in civilian life.

Greater Atlanta Chapter



BG E. Eric Porter, U.S. Army Forces Command's deputy chief of staff for personnel, inducted retired **CW4 Mario Gabriel Jr.** into the Honorable Order of St. Michael Aug. 20 at Fort McPherson, Ga. Gabriel, a Department of the Army civilian, is the aviation safety officer of the Forces Command. He was selected for induction for his 30 years of contributions and to advancing the ideals and principles that keep Army aviation "above the best."

Delaware Valley Chapter



Aviation rotorcraft pioneer **Frank N. Piasecki** was honored with a posthumous induction into the Honorable Order of St. Michael July 23 at the Paxon Hallow Golf Club in Broomall, Pa. AAAA past President and retired BG Tom Konitzer and DVC President Mark Ballew presented Mrs. Vivian W. Piasecki and sons Gregory, John and Michael Piasecki with a framed Gold medallion and certificate bearing Piasecki's name. Piasecki, who died Feb. 11 at 86, built and flew his first helicopter in 1943 and went on to invent and develop the tandem-rotor helicopter which resulted in the Army's early H-21 and H-25 helicopters, and later Boeing's CH-47 series. He is also a 1974 Army Aviation Hall of Fame inductee and President Ronald Reagan in 1986 awarded him with the National Medal of Technology for his contributions to vertical aircraft. Pictured here, l to r: Konitzer; Michael, John and Gregory Piasecki; and Ballew. Not pictured is Vivian Piasecki, who was presented with her husband's gold OSM lapel pin.

Washington Potomac Chapter



Retiring **CSM Herbert W. McCoy** was honored with the Legion of Merit and Silver medallion of the Order of St. Michael during a July 31 ceremony at the Joint Force Headquarters, Fort McNair, D.C. COL Steward E. Remaly, commander of the Air Operations Group under the U.S. Army Military District of Washington, praised McCoy for his 32 years of selfless service and as the first AOG command sergeant major. During his career, McCoy served as an aircraft armament and fire control technician, UH & MH-60A/L aircraft maintenance senior sergeant, aircraft technical inspector, aircraft standardization instructor and flight platoon sergeant. He also served more than eight years as a Night Stalker with the 160th Spec. Opns. Avn. Regt., and over 10 years in the 101st Airborne Div. McCoy plans to reside in Huntsville, Ala.

Tennessee Valley Chapter



TVC Vice President **COL Neil Thurgood** presented the Silver medallion of the Order of St. Michael to retiring **COL Michael E. Cantor** July 15 at Redstone Arsenal, Ala. Cantor, who was also awarded the Legion of Merit, served as the project manager for the Joint Attack Munitions Systems Office. During Cantor's 28 year career, he served as senior aviator and an experimental test pilot in operational and acquisition assignments. As the PM-JAMS, he led the development and acquisition efforts of aviation rockets and missiles, to include developing the future Joint Air to Ground Missile, modernize and improve the Hellfire missile with new lethal multi-mission capabilities, and added new capabilities to the venerable 2.75-inch rocket. Cantor plans to stay in the Huntsville community to work with industry.

UPCOMING EVENTS

NOVEMBER 2008

Nov 3 - 5 AAAA ASE Symposium, Nashville, TN

DECEMBER 2008

Dec 8 - 10 AAAA UAS Symposium,
Crystal Gateway Marriott, Arlington, VA

JANUARY 2009

Jan 7 - 9 USA Aviation Symposium,
Hyatt Regency Crystal City, Arlington, VA
Jan 23 AAAA SFI Executive Committee Meeting,
NGRC Arlington, VA
Jan 24 AAAA National Awards Committee Meeting,
NGRC Arlington, VA
Jan 26-30 Aviation Senior Leaders Conference,
Fort Rucker, AL

FEBRUARY 2009

Feb 12 - 13 Joseph P. Cribbins Product Support
Symposium, Huntsville, AL
Feb 22 - 24 Heli-Expo 2009, Anaheim, CA

MAY 2009

May 3-6 AAAA Annual Convention, Nashville, TN
May 27-29 AHS Annual Forum, Grapevine, TX

ARMY AVIATION



UPCOMING SPECIAL FOCUS:

November

- AIR TRAFFIC CONTROL
- UNMANNED AIRCRAFT SYSTEMS

December

- INDUSTRY SUPPORT AND CHALLENGES
- INDUSTRY PARTNERS LISTING



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

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E-Mail Addresses *
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Army Aviation Hall of Fame

The Army Aviation Hall of Fame sponsored by the Army Aviation Association of America, Inc., recognizes those individuals who have made an outstanding contribution to Army aviation. The actual Hall of Fame is located in the Army Aviation Museum, Fort Rucker, Ala., where the portraits of the inductees and the citations recording their achievements are retained for posterity. Each month Army Aviation Magazine highlights a member of the Hall of Fame.

***Nominations are currently being requested for the 2010 induction.
The deadline for receipt of 2010 nominations is May 1, 2009.***

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

CHIEF WARRANT OFFICER 4 JOHNNIE R. SANDIDGE

ARMY AVIATION HALL OF FAME 1977 INDUCTION

CW4 Johnnie R. Sandidge earned his Army aviator wings in February 1956.

He then received a transition into the CH-21 Shawnee helicopter and about a year later received his designation as a rated instructor pilot in the aircraft.

Sandidge served in that capacity, as well as being a standardization pilot, with units of the Sixth Army in California and the Eighth Army in Korea.

In September 1962, he arrived at Fort Hood, Texas, as the aircraft direct support maintenance officer for the 1st Armored Division, supervising 150 mechanics and providing support for the division's 103 aircraft.

From June 1966 to August 1967, Sandidge served in Vietnam as the section leader of the 1st Cavalry Division's aircraft direct support maintenance section.

When he returned to the states, Sandidge joined the 64th Artillery Group of the Army Air Defense Command in Dallas, Texas, and conducted depot maintenance training for an engine and power train platoon.

After a year there, Sandidge was assigned to the Corpus Christi floating maintenance depot anchored off the coast of Vietnam.

When he completed that tour, he attended the warrant officer advance course at Fort Rucker, Ala., and was then sent to Fort Hood as aircraft DS maintenance officer for a 1st Cavalry Division squadron.

Sandidge retired from active duty in February 1977 at Fort Hood.



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