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THE UAV: A STRATEGIC ASSET FOR THE TRANSFORMED RESERVE COMPONENT

by

Lieutenant Colonel Gary Herchenroeder
United States Army National Guard

Dr. Clayton Chun
Project Advisor

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ABSTRACT

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As the U.S. military transforms, its reserve component needs to maintain relevance through modernized equipment and strategic utilization. Shifting the Unmanned Aerial Vehicle (UAV) application into the Army's reserve component would effectively serve both purposes. This paper addresses some aspects of the currently fielded UAV program, and it contends that this resource should be brought into the reserve component. It further proposes an idea that the AH-64 Apache Helicopter has no place in the reserve component and should be replaced by the UAV. There will also be an indication that the discussed UAV employment ideas could benefit both active and reserve Army components, and that they should be reviewed by the key players within each element and by the combatant commands. The author recommends UAV utilization as a strategic resource within the Army's reserve component.

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The end of the Cold War and the subsequent rise of a multi-polar international environment present the U.S. Army with a significant challenge. The varied array of potential adversaries has led to a significant reassessment of how our Army can remain relevant across the spectrum of conflict and continue to be the dominant land combat force in the 21st century. This reassessment is resulting in a radical transformation of the Army to meet the challenges of the changing operational environment. Success in that environment depends on our capability to "see first, understand first, act first, and finish decisively across the full spectrum of operations." Essential to our seeing and understanding first will be unmanned aerial vehicles (UAVs).[1]

INTRODUCTION

Army senior leadership has identified sixteen immediate focus areas to channel its efforts on winning the Global War on Terrorism (GWOT) and increasing the relevance and readiness of the Army.[2] Army Aviation is one of those focal areas, and is the only one linked directly to a specific branch. Reserve component elements of the Army Aviation branch can identify with this need for change and can dramatically influence the pace of this change through the acquisition and utilization of Unmanned Aerial Vehicles (UAVs).

The focus of this paper concerns fielding UAVs into Army Reserve and Army National Guard aviation units. It acknowledges that some significant equipment and ideological changes must occur in order for this to happen. The most major change reflected is addressed early and involves the removal of the AH-64 Apache Helicopter from the reserve component structure. It proposes that the AH-64 is exceedingly resource intensive and therefore unsuitable as a reserve component asset. The paper will then highlight key UAV capabilities, discuss how suitably they fit into the reserve component structure, and address some aspects of the Army's current UAV fielding program. It further proposes that because UAVs are becoming an indispensable resource for our national military efforts, they should take the place of the AH-64 in reserve component aviation units. There will also be an indication that the discussed UAV employment ideas could benefit both active and reserve Army components while also fulfilling a major peacetime role for other governmental agencies.

BACKGROUND

Since the early 1990's, selected units of our Army's reserve component have been utilized at record levels. Guard and Reserve force contributions have grown from an average of 1 million duty-days a year during the 1980s, to an average of 13 million duty-days per year today.[3] Unfortunately, one of the most requested resources during crisis is also one of the reserve

component's most manpower, training, and funding intensive branches: aviation. Within the aviation branch, one particular platform requires more manpower, training and funding resources than the others and is called upon just as frequently. This encumbering platform is the AH-64 Apache Helicopter. From my perspective as a former reserve component attack battalion commander, there is no place in the reserve component for the AH-64. Although this resource is a tremendous and currently indispensable source of firepower for our nation's active duty military, it does not belong in the reserve component structure. The Apache demands extensive maintenance and personnel proficiency requirements and it has almost a nonexistent peacetime role. Additionally, it is quite difficult for traditional reserve component aviators to maintain currency and proficiency in the AH-64 platform. Army Aircrew Training Manuals (ATMs) do not distinguish between reserve component aviators and their active component counterparts regarding minimum and proficiency requirements. Consequently, even a reserve component AH-64 pilot has to commit an average of one day per week to the aircraft, whether flying or studying, to maintain required currency and proficiency. This obligation is in addition to the ordinary reserve component weekend drill requirements and other associated obligations. Balancing these tasks can become problematical and even overwhelming considering travel time to and from the flight facility, primary full-time job commitments, family expectations, business obligations, and social and religious activities. Reserve component AH-64 units will continue to have critical problems meeting the national deployment timeline requirements because of these excessive training needs. There is also a tremendous financial cost associated with maintaining this aging system while simultaneously providing sufficient flight and firing range time for crew proficiency.

Unquestionably, there is a tremendous need for mission compatible aviation resources in the reserve component. But reserve component aviation commanders need assets that can serve a meaningful peacetime role and then transition to active service when necessary. Two of the aircraft that are sensibly and quite capably fulfilling these utilization needs are the UH-60 Blackhawk and the CH-47 Chinook.[4] Although these utility and cargo aircraft also require a great amount of precious resources, they inherently provide usefulness in their peacetime, stateside roles, while also maintaining an enormous capability to contribute to the GWOT, and they help fulfill critical needs while supporting active component deployments. They are able to assist with logistical shipments, personnel movements, contingency force deployments, and other helpful roles. Additionally, they are much more user friendly for the aviators trying to fulfill their full-time job requirements, meet their family obligations, and keep up with their other societal commitments.

With these considerations and the specified intent of the Army's senior leadership concerning the aviation branch, the Army must consider structural, organizational, and combat system alternatives for reserve component aviation units. Technology allows, and future threats necessitate, the Army to consider more radical changes regarding combat systems development in lieu of traditional weapons like the AH-64. For these reasons, I am recommending that the AH-64 platform be removed from all reserve component units. This migration of resources will create ideal conditions for a transformational opportunity within our nation's military. To capitalize on this opportunity, the Army should take advantage of the technological advances that have provided another asset which is substantially better suited for reserve component aviation service in supporting the GWOT.

ENTER THE UAV

UAVs (also referred to as drones) are aircraft that can be preprogrammed or operated from remote locations, outside of the immediate threat area. They offer a unique set of capabilities to the combatant commander. Most current commanders and defense analysts view them as crucial to the success on the future battlefield. In a single mission, a UAV can find and identify a target, direct a precision guided munition (PGM) to the target, and then assess the damage to that target after impact–all without risking the life of an aircrew member. UAVs are well suited to accomplish a great portion of the Command, Control, Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR) role during extended operations. They can also relay messages during a battle, locate and/or jam enemy radar, and monitor key areas during peacekeeping missions.[5]

Although the UAV concept was developed long ago, most of the versions before the late twentieth century were not necessarily effective. The first American use was during the Civil War, when both "Union and Confederate forces launched balloons loaded with explosive devices."[6] During World War II, the Japanese tried using a similar method to strike the United States. They filled modified gondolas with explosive devices, intending to use the trade-winds as their means of propulsion. Unable to gauge success, they discontinued the process after about a month.[7] By the late 1960s, technological developments began making many of the previous UAV conceptions possible. During the Vietnam War, UAVs flew over 3,400 sorties consisting of photo reconnaissance, communications and electronic intelligence, leaflet dropping, and surface-to-air missile detection.[8] In the 1991 Operation Desert Storm, the Navy and Marine Corps used the RQ-2A Pioneer UAV to spot coastal artillery. The system was so

effective and gained so much respect that, in at least one case, Iraqi troops in the vicinity actually surrendered to it.[9]

Today's precision weapons are accurate to within one meter and will not see significant short-term improvement. We will not gain improved precision unless it is provided by larger amounts of money for marginal increases in performance, so we should learn to utilize our weapons more efficiently. This efficiency will include determining what targets to hit and when to hit them.[10] A key component of this ability is the use of various sensors which can provide continuous real-time data in a variety of conditions. Mounting these sensors on the structure of the UAV will provide this critical capability for battlefield commanders, today and tomorrow. Precision guided munitions attached to the rails of UAVs offer extended weapons coverage and greater agility for the combatant commander. Interfacing these munitions through Ground-Aided Precision Strike (GAPS) will help satisfy rules of engagement and minimize collateral damage by accurately confirming the target location and configuration before rounds are fired.[11] Considering the diminishing role of the Field Artillery Branch, this capability could be significant on the future battlefield. Inevitably, we will need precision fires; and when faced with an expeditionary role, we will need to bring our own support – UAVs.

Today there are some distinct capabilities offered by the UAV that, for certain mission profiles, make it preferable over the traditional Army helicopter. These include significantly reduced fuel expenditure and the opportunity for more aggressive application in poor flight conditions (including poor flying weather). In other words, commanders can assume greater risk without placing a pilot's life at stake. And because of their relative size advantage, UAVs also offer a quicker transition to the Area of Operations. Realizing that because UAV systems are essentially 'light,' they require a smaller logistical support trail than conventional Army aircraft meaning that other critical items could be sent in the remaining space inside the highly valued strategic lift. This translates into fewer personnel being called-up or deployed, and also offers a smaller target once in theater. Additionally, there is potential to minimize intrusion into the host nation by controlling the flight operations from another area of the theater, or even from the continental United States (CONUS).

By definition alone, the UAV reduces Soldier exposure risk on the battlefield. This characteristic should be a primary consideration to support prompt fielding into all facets of our military. We should also consider that traditional Army aircraft have been somewhat hampered in the ability to conduct continuous flight operations because of restrictions caused by crew endurance levels, aircraft fuel range, and extensive maintenance requirements. The UAV offers a distinct advantage in each of these areas. The current fleet of Army UAVs was designed with

a planning range of 50-300 kilometers offering endurance times between five and eight hours. These figures more than double the capabilities inherent in the Army's current helicopter platforms which are restricted not only by fuel capacity limitations, but also pilot fatigue. We can also switch UAV 'pilots' at any time and can have one pilot controlling multiple missions. Regarding maintenance comparisons, between FY 2001 and 2003 there were more than "1,000 Shadow flights totaling more than 2,000 flight hours, with an operational availability rate of more than 95 percent."[12] This is an incredibly high readiness rate for any type of vehicle, and probably unmatched in the aviation world. Because the UAV platform is so easily adapted to different missions, the alternative configurations and future possibilities are virtually limitless.

Army UAVs have advanced through the development phase and have been successfully utilized in operations and training for several years. Although early prototype versions had some severe limitations and initial program development was somewhat slow, the resulting product has become nearly indispensable to the combatant commander. "Currently, the Army is a customer for the AAI (UIC) Shadow, which received the go-ahead for full-rate production last fall [(Defense Daily, Oct. 1)]. It also has conducted tests with the Northrop Grumman (NOC) Hunter UAV armed with Northrop Grumman's Brilliant Anti-armor (BAT) munitions package."[13] The Army is now employing two versions of the UAV: the RQ-5A Hunter and the RQ-7A Shadow 200. Through modernized technology, these UAV platforms will provide their commanders with a wide array of C4ISR capabilities and greatly assist the rapid dispersion of critical real-time battlefield information, enabling mission performance with greater audacity. Stryker brigades in the active and reserve component are being fielded with the RQ-7A Shadow 200 UAVs. Unquestionably, this fielding is a step in the right direction for the entire Army. But these resources should also be brought into the traditional reserve component aviation units because they offer some other tremendous advantages over traditional military aircraft.

Both of the Army's UAV systems carry an electro-optical infrared payload and perform a variety of missions including reconnaissance, surveillance, target acquisition, and battle damage assessment. The Army operates both systems in Iraq and the Shadow was recently introduced to South Korea to complement the Republic of Korea's Army UAV systems.[14] Future variants of these Army UAVs will certainly be configured with a range of weapons, just as the Air Force and Navy have done with their larger Unmanned Combat Aerial Vehicles (UCAVs). In order to fully take advantage of these tremendous combat multipliers, it makes sense to place them into the Army's reserve component attack helicopter units. Based on cost, training and maintenance requirements, ease of deployment, and peacetime functionality, the UAV and the UCAV platforms are clearly more sensible resources for reserve component aviation units than the AH-

64 Apache. At a minimum, the unmanned alternatives would offer a far more affordable and sustainable training and currency regimen than the overwhelmingly complex and resource intensive AH-64 program.

Continuing research and development will widen the array of UAV capabilities. Potential program options include micro vehicles dispensed from larger vehicles, Multiple Launch Rocket System (MLRS) deployment, nano technology, and stealth systems.[15] "The Army is also pursuing the Unmanned Combat Armed Rotorcraft (UCAR) program in conjunction with the Defense Advanced Research Projects Agency (DARPA)."[16] This system is more like a traditional helicopter and is already under assessment by the United States Navy and Coast Guard. Known as the RQ-8A Firescout, the system "has demonstrated an endurance of about five hours with a 200-pound payload."[17] Pending modifications include a four-bladed main rotor system which is expected to increase efficiency allowing an endurance of nearly nine hours with the same payload.[18] In the future, the size, payload, system effectiveness, and cost will make UCAVs a potential to replace a host of systems. But, before any of these ideas move to the Army's production line, we must weigh costs while comparing associated benefits, and consider the collective strategic, operational, and tactical implications.

Current UAV systems flown throughout our military force structure have been highly successful and program funding levels have been expanding at a rapid pace. But the relatively small UAV program in the Army can expect to receive only about 10 percent of the 15 billion total dollars to be spent military-wide on UAV program development between 2003 and 2009.[19] The FY 2004 Department of Defense Appropriations Act recommended $1.4 billion for procurement and continued development of UAVs, which is nearly a $225 million increase from the fiscal year 2003 levels. The 2004 amount includes funds for the procurement of four Global Hawk UAVs, sixteen Predator UAVs, two Predator B UAVs, eight Shadow UAVs, and eight Firescout UAVs. The Committee also provides $270 million for continued development of Navy and Air Force UCAVs.[20] With this broad level of military support and Congressional attention, it is likely that the UAV platform will continue to enjoy greater utilization throughout the scope of U.S. military operations. Perhaps the Army should attempt to save some funding by purchasing systems already being fielded by the other services. This action would also provide evidence of a more resounding effort toward interoperability and reliability.

We cannot assume that any equipment fielding process will go unhindered by delays associated with unforeseen circumstances, but in this case the UAV program has been utilized over time by all services in a variety of tactical, operational, and strategic roles. Because of the current base of knowledge regarding the UAV program and the inherent systems awareness

within the reserve component aviation branch, it is likely that this transition would occur without extraordinary difficulty. We should remember that even the most powerful and progressive combat aviation element in the world, the U.S. Air Force, has placed vast resources toward developing, implementing, and operating unmanned platforms. They are enjoying tremendous success in this effort and are operating the two most widely known UAV platforms: the RQ-1A Predator and the RQ-4A Global Hawk. The Air Force has actively deployed both of them throughout the world, primarily in C4ISR roles. Their premier system, the Global Hawk supported U.S. and coalition war fighters during Operation IRAQI FREEDOM by flying 16 missions totaling 350 hours, and gathering more than 3,500 images of potential Iraqi and al-Qaeda targets. Though "flying only three percent of the war's air-breathing imagery intelligence missions and five percent of its high-altitude recon sorties, Global Hawk located 55 percent of time-sensitive targets, including 13 full enemy Surface-to-Air Missile (SAM) batteries, more than 50 SAM launchers, 300 SAM canisters, and 70 SAM transporters, plus more than 300 tanks totaling 38 percent of known Iraqi armor."[21] This example shows that significant cultural change can occur over time, and that even the most resolute organizational paradigms are not insurmountable, even in a pilot-centric culture like the U.S. Air Force.

Regardless of the amount of planning conducted, there are associated risks in the operation of any system. In this case, an inherent risk is loss of the UAV system itself. This could occur through enemy action, adverse weather, component failure, or system anomaly. These mishap causes are not unique to the UAV and have occurred in traditional aircraft since the beginning of manned military flight. Although UAV procurement costs are high, they are not excessive when compared to most other flight systems. "In reality, each Predator costs approximately $3.2 million," merely a fraction of the cost of a modernized conventional aircraft.[22] And according to FY-03 procurement dollars, the 41 RQ-7 Shadow UAVs purchased for the Stryker brigades cost the Army $99 million, reflecting a unit cost of $2.42 million.[23] Upon comparing these figures to the current costs for the AH-64D Apache Longbow, which hover around $24 million, UAV costs are exceedingly preferable.[24] Future adaptations of the UAV might even be considered expendable assets. It is really not beyond our grasp, considering our aggressive employment of the cruise missile which now costs about four hundred thousand dollars per shot.[25]

Because the UAVs fly in the same atmosphere as other aviation resources, an additional potential risk involves an aviation mishap with a conventional aircraft or another UAV. This hazard could be de-conflicted through airspace command and control procedures such as defining altitudes for operation according to type, or assigning operational sectors. Another risk

is placing too much reliance on electronic mechanisms. As helpful as they are, these and all other technological systems should merely support the efforts and needs of our nation and our Soldiers, and should never become burdens for security or manpower. In other words, network centric warfare is useful to the extent that it supports the Soldier, not an end to itself.

WHY THE RESERVE COMPONENT SHOULD HAVE UAVS?

The military environment concerning budget, utilization, theme of change through transformation, and deployment schedule justifies the argument for placement of the UAV into the reserve component. Transformation is no longer deemed a catch-phrase for our Army. In light of reduced procurement funding and increasing demands for forces, transformation has shifted from a vision to a reality. [26] We must transform by effectively structuring, resourcing, and training our units into flexible elements that can adapt to defeat the ever-changing enemy in a multitude of environments. In short, we must be prepared to cover all possible conflicts with a watchful eye on our precious resources. In order to effectively accomplish this colossal goal, we must determine how to best utilize the greatest transformation agent available: technology. We no longer have the luxury of spending multiple years to develop combat systems for our future utilization; we need to use more efficient research, share efforts with our sister services, and consider off-the-shelf components to enable the country to outpace any future adversaries.

One of the most influential and flexible resources in today's inventory is the UAV. This system is not a replacement for the current fleet of Army helicopters. Rather, the UAV serves as a complementing agent providing combatant commanders with greater flexibility, continuous operations, increased span of control and responsiveness, and the capability of incurring greater operational risk without jeopardizing American Soldiers. Therefore, UAVs could be used in conventional and non-conventional conflicts with a reduced concern for enemy Air Defense systems. The traditional Army aviation units will still employ their helicopters to provide air assault, lift, general support, medical evacuation, scout, and attack missions, but they will be supplemented by UAVs from the reserve component. When not needed to support active duty requirements, UAVs could offer a distinct advantage for reserve component efforts in the GWOT. Creating UCAV units in the reserve component could allow greater autonomy for the combatant commander, offering an immediate CAS capability for strategic strike/interdiction, and equally flexible Intelligence, Surveillance, and Reconnaissance (ISR) all without risking more of our precious Soldiers. This action would also reduce the reliance on Air Force, Navy, and USMC sorties, thereby releasing them for other missions. Additionally, utilizing these

armed variants of the UAV would reduce the requirement for forward deployed fighters, further minimizing risk to our precious Soldiers, Sailors, Airmen, and Marines.

Although there is no specific national position on the development or implementation of UAV systems, the prospect for further program expansion is quite likely. So, now is the time to consider and debate these ideas before policy is made. With its fundamentally simple configuration and relatively small cost, it is the highly adaptable combat multiplier that will meet the needs of the battlefield commander today and tomorrow. UAVs offer the capabilities of rapid deployment, greater speed, longer loiter time, and they also provide a smaller target for enemy air defenses. And they offer these capabilities while reducing the number of Soldiers committed to the battle. Yet this useful technology is not widely fielded in our Army's active component, and is not available to the rest of the Army…the reserve component. UAVs should be quickly introduced into the Army's reserve component in order for those organizations to maintain relevance for future strategic utilization.

PROPOSAL TO INTEGRATE UAVS INTO THE RESERVE COMPONENT

Options concerning employment of these adaptations in reserve component aviation units are numerous. Because of their familiarity with flight equipment and their maintenance knowledge and capacity, it would be feasible to completely outfit every reserve component aviation unit, regardless of type, with some amount of UAV platforms. However, because the AH-64 is not particularly well suited as a reserve component asset, I have chosen to focus only on attack units. With this limitation, one course of action would offer adding the UAV to all reserve component AH-64 units as a complement to their current resources. The more radical option involves totally replacing all reserve component AH-64s with UAVs. I am recommending the second option because it will significantly diminish the financial and training burden placed on the reserve component while also offering a more flexible resource for use during peacetime, during active duty deployments, and for supporting the GWOT.

I acknowledge that removing the AH-64 from reserve component units will probably cause a significant emotional event for many of the units currently fielded with them. But more importantly, I believe that the long-range benefits of assigning the UAV with its superior reserve component suitability, will far outweigh the transformational costs. Our sister service, the Air Force, is already creating a composite UAV unit. According to LTG Steven Blum (Chief, National Guard Bureau), the active duty Air Force is working with the Air Force Reserve and Air National Guard units from California and Nevada to form a "blended" unit to operate the Predator UAV system. This unit is expected to be operational later this year and will provide

additional surveillance capabilities and also take advantage of potential synergies between the active and reserve forces.[27] The Army should make a similar commitment to ensure the future relevance of reserve component aviation resources.

Replacing all reserve component AH-64s with UAVs will free those aircraft to be utilized in the active component. The reserve units currently owning AH-64D Longbow models could easily flow their resources into active component units, while the reserve units owning the AH-64A models could send their aircraft directly through the modernization process to become 'D' models. Upon completing the modernization process, each aircraft could then be apportioned to the active component for utilization. Realizing the expense of this modernization process, funds could be drawn from the ever increasing Comanche budget. "Congress and the Defense Department need to get this program under control before it becomes another black hole for taxpayer dollars."[28] Arguably, the Army wouldn't need as many (or possibly any) Comanche aircraft if the AH-64D were fielded more widely.

THE PROBLEM OF RESERVE COMPONENT TRANSFORMATION

Transformation, concerning our Army's reserve component elements, has commonly been provided through the reassignment of dated equipment from the active component. Although both the Army Reserve and the Army National Guard are consistently called critical elements of nation's military, often they are provided equipment and roles that are secondary or they are insufficiently resourced to sustain suitable unit readiness levels. Furthermore, while they have previously received some advanced equipment, much of it has not provided a specialized capability that was also useful in their peacetime roles. An additional problem is receiving equitable support for tools and parts to support the advanced equipment. "While significant quantities of modern series UH-60, CH-47, and AH-64 aircraft have been cascaded from active Army units to Army Guard units, the associated equipment (tool set, tool kits, test equipment, and parts) critical for the successful support of these aircraft has not kept pace."[29] During the current transformation effort there is a grand opportunity to exploit an underutilized resource and concurrently provide a new and critical role to the Army's reserve component elements, with meaningful application in peacetime and upon deployment.

The UAV is well suited to support the reserve component transformation effort. Placing the UAV platform in reserve component aviation units will provide a more critical balance of resources that are also useful during stateside peacetime efforts. The realities of our future modernization should be considered now. Because ongoing operations will directly impact the defense budget, we can expect that fewer dollars will be available to purchase transformational

equipment. For 2004, the “President's budget allots $72 billion in the area of modernization; however, to replace our major military platforms like tanks, ships and aircraft, we need at least $90 billion per year. As a result of this shortfall, Army helicopters now average l8.6 years of age.”[30] Because the military services can expect to have similar shortfalls well into the future, there is a need to ensure equipment that we pursue is versatile, modular, and durable. Through its functionality, the UAV is extremely well suited for use during routine peacetime scenarios including homeland defense functions, state emergency duty, border patrol, surveillance, forest fires, and flooding.

Realizing that it would not be realistic to introduce any combat system into the Army (active or reserve component) without first conducting transitional training, the Army could provide on-site training to the receiving units. New Equipment Training (NET) methods could greatly assist this transformation and offer the reserve component units an equal hand while the active component is still in the early stages of fielding. Consistent with the thought that this resource would be best placed in aviation units, it would make sense for NET teams to provide the transitional training on location. The aviation units could provide access to appropriate ramps, runways, training areas, and maintenance facilities. This would probably be the most cost effective method of providing this training.

RECOMMENDATION

I highly recommend that the Army place significant UAV resources into the reserve component structure, effectively replacing the current attack platform units. This fielding should consist of currently available systems (the Hunter and the Shadow), and also provide for plans to introduce the next generation of UAVs. There is little question that, largely due to the high operational tempo level, the Army’s future procurement budget will suffer. Because of this, we must make more efficient use of the dollars we are provided. The UAV has already been proven as a tremendously capable and cost effective combat vehicle and should be utilized as a strategic resource by the reserve component of our Army. Now that the Army’s proponent agency for UAVs resides within the Army’s Aviation Branch, this adjustment could be made with minimal impact on operational units.[31] In an attempt to glean greater utility from this flexible resource, reserve component units could also employ it during operational missions away from the battlefield.

In review, the UAV system is not intended to fully replace the traditional lift and attack helicopter roles provided by the Army Aviation branch. Rather, it would serve as a supplementary combat multiplier offering extended ranges, greater efficiency, less operational

risk, and quicker response times. Additionally, it is capable of supporting the trend toward smaller, lighter, more deployable units. Aviation units within the reserve component could readily be structured and staffed to operate, maintain, and deploy this critical national defense resource in support of worldwide contingency operations. This could alleviate some of the Army's current reliance on traditional Air Force, Navy, and Marine Corps assets, releasing them for other roles. The reserve component elements could also expand their mission and market UAV services to other branches of our government including Homeland Security; the Federal Bureau of Investigation; the Bureau of Alcohol, Tobacco, and Firearms; the Immigration and Naturalization Service; and others including state governments. It is quite likely that these agencies would call upon the reserve component in an attempt to also benefit from these resources when they were not otherwise deployed. This technology sharing mechanism could serve as a cost savings program for all associated elements, and provide a continuing and meaningful mission for our reserve components.

Our Army's reserve component elements should be given the mission to operate a significant portion of the Army's UAV program. The reserve component is already structured and staffed to operate, maintain, and deploy this critical national defense resource. As the entire military transforms, the Army's reserve component needs to maintain relevance through modernized equipment and strategic utilization. Shifting the UAV application into the reserve component would effectively serve both purposes. At this point, maybe it's not really a matter of choice. Based on the success we are seeing in current UAV programs and the need to keep the reserve component fully integrated and vital – what option does the Army really have?

WORD COUNT= 5,106

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