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LCDR Norman T. Johnson, USN

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14. ABSTRACT

For years, there has been one constant challenge for the United States and coalition military operations in Afghanistan: insufficient rotary wing aircraft. The question must be asked, is the military lacking sufficient rotary wing assets, or is the lack of jointness preventing the efficient use of its assets across all branches of the service? This paper proposes that the problem lies in a lack of jointness due to divergent tactics, techniques and procedures (TTPs), not a lack of assets. Each branch of the service operates under its own Weapons schools that create service specific doctrine and TTPs. Creating and Joint Weapons School and Doctrine that overarches the service weapons schools will ensure a unity of effort by aligning TTPs and Doctrine at the Operational level. By reviewing several ad hoc helicopter missions, this paper will demonstrate that divergent TTPs and parochial protection mechanisms prevent joint capabilities. The creation of a Joint Weapons School will force emulation of the Joint Fixed Wing Tactical Air capabilities and JFACC created through pre-deployment joint training, and exercises.

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Why aren't helicopters operating jointly: A case for a Joint Helicopter Doctrine

by

Norman T. Johnson

Lieutenant Commander

United States Navy

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

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27 October 2010

Abstract

For years, there has been one constant challenge for the United States and coalition military operations in Afghanistan: insufficient rotary wing aircraft. The question must be asked, is the military lacking sufficient rotary wing assets, or is the lack of jointness preventing the efficient use of its assets across all branches of the service? This paper proposes that the problem lies in a lack of jointness due to divergent tactics, techniques and procedures (TTP), not a lack of assets. Each branch of the service operates under its own Weapons schools that create service specific doctrine and TTPs. Creating and Joint Weapons School and Doctrine that overarches the service weapons schools will ensure a unity of effort by aligning TTPs and Doctrine at the Operational level. By reviewing five ad hoc helicopter missions, this paper will demonstrate that divergent TTPs and parochial protection mechanisms prevent joint capabilities. The creation of a Joint Weapons School will force emulation of the Joint Tactical Air capabilities and JFACC created through pre-deployment joint training, and exercises.

Introduction:

According to the US Naval Institute, "There has been one constant challenge for the United States and coalition military operations in Afghanistan: insufficient rotary wing aircraft. Rotary assets ferry supplies, carry soldiers, and provide air support all over the country. Put bluntly, helicopters are the coin-of-the-realm: the more you have, the more you can do. And we do not have enough."[1] Indeed, it does appear that the US military is lacking sufficient rotary wing assets, but the question must be asked. Is the military lacking sufficient rotary wing assets, or is the lack of jointness preventing the efficient use of its assets across all branches of the service? As with most capabilities introduced prior to the 1986 Goldwater/Nichols act, the helicopter was not developed jointly. It was tailored to meet different missions based on the needs of the branch of the service that acquired it. In the words of CDR Sullivan, "Requirements often generated stand-alone solutions. New programs were not conceived interoperable and joint"[2] The Navy created helicopters that could execute Anti-Submarine warfare, all weather over water search and rescue, and logistics support to name a few.[3] The Army and the Marine Corps tailored their helicopters to support the ground force commanders. An unfortunate side effect of the individual service myopic view is the development of defensive parochial mindsets throughout each branch of the military.

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[1] U.S. Naval Institute (USNI). "Hard Power, Soft Power, and Helicopters, 11 Aug, 2010" http://blog.usni.org/2010/08/11/hard-power-soft-power-and-helicopters-2/ (accessed 14 Oct, 2010)
[2] Sullivan, CDR Sean. *Capabilities-Based Planning: Joint Capabilities Integration and Development System (JCIDS) and the Functional Capabilities Board Process (FCB)*. Newport, RI: NWC Press, 2006, 3.
[3] Boyne, Walter and Donald Lopez. *Vertical Flight: The Age of the Helicopter*. Washington, DC: Smithsonian Institution Press, 1984, 35.

Unfortunately, these "stove piped" missions and inter-service rivalries have prevented the services from training and operating jointly. This lack of jointness is seen at the operational level when a single service does not have enough helicopter assets to meet its assigned missions. Typically, it is only at this moment of desperation that the other branches of the service are brought in to support it, and even then, the jointness of the effort is suspect. Though there are many parallel helicopter capabilities throughout the armed forces that could be utilized by a Joint Force Commander, many times the "stove pipe" mentality prevents commanders from maximizing the full potential of ready helicopter assets because some are being under-utilized or kept off the battlefield completely, simply because of parochial motives. Creating a Joint Helicopter Weapons School which will develop a standardized Joint Helicopter Doctrine would be a solution that enables Combatant Commanders and JFC"s the ability to fully realize the full combat potential of all helicopter assets assigned to them from each branch of the service.

This paper will investigate some recent historical examples of ad hoc joint missions and highlight the weakness in the current mode of operations. This paper will demonstrate that many helicopters missions are similar and that joint Tactics, Techniques, and Procedures (TTPs) could enable helicopter forces to operate more effectively as a joint force. Next, the paper will go into detail about the purpose of the Joint Helicopter Doctrine (JHD). It will explain how the JHD will enable helicopters from all branches of the service to cooperate and achieve unity of effort in the Joint environment, thus allowing mission specific helicopters to be freed from mundane tasking in order to complete priority niche missions. Lastly, the paper will make recommendations for the creation of a Joint Helicopter Weapons School, and Doctrine.

Similar mission capabilities and a lack of joint training cause inefficiency

Ideally, "Service and Joint doctrine are the principal means of promoting a common outlook on the nature and character of warfare and all its aspects. The need for the closest cooperation among the services-jointness-should be emphasized."[4] However, reality proves otherwise. Unfortunately, the military"s helicopter fleets prefer an ad hoc method for conducting "joint" missions. Moreover, they rarely utilize pre-deployment joint training or exercises prior to the actual operation. Furthermore, these "joint" missions usually take place when the service tasked does not have enough assets to meet the requirements of the tasking.

For instance, United States Central Command (CENTCOM) lessons learned highlight the shortage of rotary wing aircraft available to support the intra-theater medical evacuation (MEDEVAC) mission. The reports indicate a general shortage of Army rotary-wing lift, further exacerbated by navigation equipment shortfalls precluding the assignment of casualty evacuation (CASEVAC) capable platforms to the dedicated Air Ambulance mission.[5]

> By the time the issue was nearing critical proportions, Army (helicopter) forces and equipment had been deployed to near exhaustion because the service-oriented approach to providing the required capability did not readily support looking for a solution beyond traditional roles. Dedicated Air Ambulance is a U.S. Army task; however, the magnitude of the mission directed a non standard solution. The near-term capability gap was assigned to the Navy.[6]

Prior to 911, naval helicopters were capable of MEDEVAC missions; however, neither service envisioned CASEVAC as a joint mission and therefore did not train jointly. This lack joint cooperation between the services led to inefficiency in helicopter management, and delayed load sharing between the services even when one service was

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[4] Milan Vego, *Joint Operational Warfare* (Newport, RI: United States Naval War College, 2007), XI-12.
[5] Shirey, Eric. "Joint Aeromedical Evacuation: Why isn"t it adequate for the battlefield." research paper,Newport, RI: U.S. Naval War College, Joint Military Operations Department, 2004, 10.
[6] Chris D. Hayes, "Joint Helicopter Command: The „Purple" evolution of Rotary-Wing" research paper, Newport, RI: U.S. Naval War College, Joint Military Operations Department, 2006, 4

extremely over taxed. Though the Navy continues to support the Army‟s Air Ambulance mission in Iraq, it is not joint in nature, it is a Navy only mission.[7] This example plainly demonstrates lack of joint training and cooperation between the services. In order for the Air Ambulance mission to be considered "joint", Naval assets would need to be operating under the same command as the Army. Without dedicated joint cooperation between the services, one branch could find itself overwhelmed again in the future.

That is precisely the issue the Army is struggling with in Afghanistan, and may once more need to call upon its sister services for helicopter support.

> "The upcoming buildup of U.S. forces in Afghanistan will put additional pressure on the Army‟s already overstretched helicopter fleet, officials said.
>
> For the service‟s aviation units, the challenge will be twofold: keep up with a growing demand for helicopters in two major war zones and, simultaneously, maintain and upgrade a fleet that for six years has taken a beating from harsh weather and sand.
> The demand for helicopters in Afghanistan is going to double, said Frederick Pieper, logistics specialist at the Army‟s Aviation and Missile Command.
>
> The buildup may require more helicopters than the Army can spare, said Stephen Biddle, senior fellow for defense policy at the Council for Foreign Relations, in testimony to Congress in February.
>
> Cargo helicopters, particularly, will be taxed as ground transportation convoys that travel from Pakistan into Afghanistan suffer attacks by the Taliban."[8]

As expected, the Army‟s already overtaxed helicopter fleet, found itself in a terrible position and could not render much assistance to Pakistan when the July 2010 floods demanded helicopter support.

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[7] Kyle Strudthoff, Lieutenant Commander, USN, interview by author 05 October 2010. (Note: LCDR Strudthoff is currently the PXO for HSC-26, which is one of the Naval Squadrons assigned the air ambulance mission.)

[8] Mathew Rusling, "Army Helicopters Brace for Afghanistan Buildup". http://www.nationaldefensemagazine.org/archive/2009/April/Pages/ArmyHelicoptersBraceForAfghanistanBuildup.aspx (accessed, 23 September 2010).

> In response to the deadly flooding in Pakistan, the Pakistani military reassigned some helicopters from combat operations to disaster relief. For its part, the US military provided six helicopters to the relief efforts, however it kept the bulk of its rotary wing assets in Afghanistan."It"s a question of risk mitigation," the official said. "Helicopter lift is critical to the mission" in Afghanistan, where road transport is difficult and dangerous, he said. "It"s not like we have a great surplus of helicopters in theater that are not engaging."[9]

Indeed, each branch of the service has helicopter capabilities that can meet these missions, but the lack of a joint helicopter doctrine, parochial mindsets, and/or lack of joint Tactics, Techniques, and Procedures (TTPs) preclude the sister services from fully supporting the Army in Afghanistan and Pakistan.

Army Helicopters Struggle in the Maritime Environment

Operation EARNEST WILL (1987) and Operation ENDURING FREEDOM (OEF) are examples of how ad hoc "joint" missions led to unforeseen problems. During the tanker wars, the US Navy"s primary focus remained on blue water threats, and did not have the capability to use its helicopters for Special Operations. Therefore, the Army"s Special Operations Aviation Regiment (SOAR) was tasked to stage from static barges in the Arabian Gulf to protect neutral shipping in order to defend tankers transiting the gulf[10] A decade later the SOAR was used at the onset of Operation Enduring Freedom (OEF) 2001. They were deployed on USS Kitty Hawk for the purposes of lifting the 75th Ranger regiment into Afghanistan.[11]

At first glance this appears as a joint effort between the Army and the Navy, yet some problems surfaced from these ad hoc missions. First, Army and Naval helicopters did not

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[9] U.S. Naval Institute (USNI). "Hard Power, Soft Power, and Helicopters, 11 Aug, 2010" http://blog.usni.org/2010/08/11/hard-power-soft-power-and-helicopters-2/ (accessed 14 Oct, 2010)

[10] John W. Partin, *Special Operations Forces in Operation EARNEST WILL/PRIME CHANCE*.
[11] Norman Friedman, *America's New Way of War*, 161.

operate jointly, in both cases Army helicopters operated independently from Navy Helicopters. Second, Army aircraft are not built to operate at sea. They do not have the corrosion protection naval assets have, nor do they have electromagnetic shielding on their avionics, or ordnance which is required while operating in close proximity to RADAR and other radiating equipment found on board ships. Additionally, the Army pilots and naval aircraft controllers required further training in order to ensure safe operations. "There is much more to operating aircraft at sea than landing on ships", said Navy Capt. James Thompson, in a recent interview. "It"s not just the uniqueness of operating off a ship, but you"ve got salt air, salt water, unpredictable winds, the pitch-and-roll of the ship and certain constraints with regard to what the ship has on board and can accommodate."[12]

As a result of these operations, the Defense Department believes that non-Navy helicopter pilots trained to land on ships would help improve joint warfare. That is the rationale behind the Joint Shipboard Helicopter Integration Process (JSHIP), a $22.5 million project that seeks to enhance the compatibility of non-Navy helicopters with shipboard systems, of which, CAPT. Thompson is the program director. "His goal is to ease the difficulties associated with non-Navy helicopter landings on ships."[13] This program is ideal for creating joint helicopter capabilities, however, under the current concept it is primarily a navy effort. This program may be able to see greater results if it was developed thru a Joint Helicopter Weapons School. Operating under the Joint Weapons school would ensure that not only is the Army and Navy working together, but all branches of the service would be incorporated into tests and evaluations.

[12] Elisabeth Book, Non-Navy helo pilots train for ship-deck operations. http://www.nationaldefensemagazine.org/archive/2001/June/Pages/Non-Navy4244.aspx (accessed, 20 Sept 2010).
[13] Ibid.

Special Operations Capabilities Suffer Due to Poor Helicopter Management

In some instances, SPEC OPS helicopters are tasked with conventional missions because of a lack of inter-service cooperation, or understanding of sister service conventional capabilities. The Air Force, for example, has experienced a disparity between mission requirements and mission capability in the joint environment due to TTPs that were adapted solely for its service requirements. "Now we're using our combat search and rescue forces to perform casualty evacuation (CASEVAC) under fire," said Maj. Scott Sheppard, a combat rescue officer at the Air Force Special Operations Command (AFSOC). These evacuation missions have "significantly increased the operational tempo for all AFSOC vertical lift aircraft and recovery teams," he added.[14] Casualty evacuation has traditionally been considered a collateral capability of the scarce and specialized rescue teams, which are classified as high-demand, low-density units. "While the number of missions flown in Afghanistan and Iraq doesn't appear excessive — averaging over one a week — combatant commands demand a 24/7 response."[15] Using AFSOC helicopters to perform this collateral duty means that there are less flight crews to perform the 24/7 strip alert, and is a diversion from the primary mission of SPEC OPS. Another problem with using Special Operations helicopters for CASEVAC is that those types of units are highly specialized and small in number. Diverting these assets to perform CASEVAC means Special Operations ground forces have less lift capability. A more joint force may be able to utilize Naval or Marine Corps assets for CASEVAC, thus freeing up the AFSOC helicopters for their more important mission of Special Operations

[14] Michael Peck, "Combat Rescue Units See Shift in Missions, National Defense Magazine." http://www.nationaldefensemagazine.org/archive/2006/May/Pages/CombatRescue5333.aspx (accessed 18 Sept, 2010)
[15] Ibid.

The Navy too, has seen significant integration problems when ad hoc tasking has placed conventional naval helicopter forces under Special Operations Command. In 2008, a detachment from HS-14, a carrier based helicopter squadron that has significant training in Naval Special Warfare and Personnel Recovery, was sent to Iraq in order to provide lift to Special Operations forces. Although conventional naval forces routinely train for Special Operations, which is an authorized mission area in accordance with the Seahawk Weapons and Tactics Program (SWTP), they are not considered as a viable asset by USSOCOM.[16] In spite of their capability, USSOCOM begrudedly accepted the naval detachment from HS-14 only when it could not find support from traditional USSOCOM approved helicopter forces. Additionally, the Detachment had to undergo special training at the National Training Center (NTC), in Ft. Irwin, California before being allowed to operate in the Iraqi theater of operations. When in the theater, the squadron was first placed on logistics missions until it proved to USSOCOM that it could, indeed, operate in Iraq.[17]

Clearly, there are assets that are trained and available to meet the mission, yet they are only called upon when traditional, trusted, assets are not available. This indicates that the US military may not be lacking rotary wing assets, but instead lacking in jointness. Through joint training prior to deployments, trust and confidence would be built, and more assets could be called upon to meet the requirements in theater. Service specific weapons schools with divergent TTPs are another area that inhibits a truly joint helicopter force.

Divergent Service Specific Weapons School TTPs Reduce Jointness

[16] Kyle Strudthoff, Lieutenant Commander, USN, telephone interview by author 20 September 2010. (Note: LCDR Strudthoff was the Operations Officer of HS-14 during the detachment.)

[17] Kyle Strudthoff, Lieutenant Commander, USN, telephone interview by author 20 September 2010. (Note: LCDR Strudthoff was the Operations Officer of HS-14 during the detachment.)

From the examples listed above, it is evident that the services are struggling to cope with the missions in Iraq and Afghanistan. Attempts to cooperate and load share have made progress toward jointness, but the current system of service specific Weapon Schools, uncoordinated training, and divergent TTPs has created stove piped solutions and inefficiencies throughout the DOD. For example, a problem the Air Force is dealing with is how to cooperate with the other services during search and rescue operations. Although the Air Force has primary responsibility for combat search and rescue, all of the services have units that conduct life-saving missions; however, "The problem is that all of these organizations operate differently," said Air Force Reserve Col. Steve Kirkpatrick, commander of the 920 Rescue Wing at Patrick Air Force Base, Fla. "The Air Force has one way of doing things; the Army has another," he told a recent conference in Arlington, Va. The same is true of the Navy, Marines, and Coast Guard and civilian emergency services. "We have to work on a standard game plan."[18]

In order to address this problem service specific Weapon Schools must recognize that there are fundamental missions all helicopters are capable of performing and must ensure that TTPs are aligned in order to create efficiency and cooperation throughout the DOD.

Currently, each branch of the service has developed Helicopter Weapons Schools which are designed to standardize TTP's for their particular branch of the service. The Navy has the Naval Strike and Air Warfare Center (NSAWC) which is the umbrella organization that contains Navy Fighter Weapons School (Top Gun), Carrier Airborne Early Warning Weapons School (TOPDOME) and, The Seahawk Weapon School for navy helicopters. The Marine Corps has Marine Aviation Weapons and Tactics Squadron (MAWTS), the umbrella

[18] Harold Kennedy, "Service teams seek cooperation to save lives." http://www.nationaldefensemagazine.org/archive/2006/December/Pages/Serviceteams2774.aspx (Accessed 24 Sept, 2010)

organization responsible for developing and refining air tactics which include fixed wing, rotary wing, and ground forces that work closely with these units.[19] Similar Weapons Schools are found in the Air Force and the Army that perform the same function for their branch of the service.

This system has enabled each branch of the service to standardize and elevate each squadron within its service to a minimum base line required before being certified for deployment. The problem is, however, under the current system of independent weapons schools, in many cases, the helicopters fulfill similar missions in the same operating environment yet they may have conflicting TTP"s. Currently, "the Navy does not have plans to develop joint integration with the other branches of the service. The Navy feels that its helicopter assets should be used sparingly in overland or joint missions"[20] Furthermore, LCDR Frank Ingargiola, the Officer in Charge of the Weapons School detachment in Jacksonville Florida, confirmed that Navy helicopter weapons schools only occasionally conduct joint training, and that training revolves around defensive combat maneuvering against "aggressor" helicopters, which by no means, meets the intent of joint tactical training.[21] In LCDR Chistopher Hayes" paper, he asserts that, "There is, in most cases, no real difference and no genuine requirement for divergent procedures, only the illusion of such

[19] Ted Carlson, "MAWTS-1 hones warfighting edge. 1 - Marine Aviation Weapons and Tactics Squadron MAWTS". Naval Aviation News. FindArticles.com. http://findarticles.com/p/articles/mi_m0IAX/is_6_84/ai_94262327/. (accessed, 13 Sep, 2010).

[20] Neal Hoffman, Lieutenant Commander, USN, telephone interview by author, 18 Sept 2010. (Note: LCDR Hoffman works at the Seahawk Weapons School in Fallon Nevada).

[21] Frank Ingargiola, Lieutenant Commander, USN, telephone interview by author, 30 Sept 2010. (Note: LCDR Ingargiola was the OIC of the Weapons School detachment Jacksonville FL).

generated as a by-product of service culture."[22] This aversion to jointness demonstrates the Navy's single service mindset and fear of losing control of its helicopter assets.

Moreover, divergent TTP's for similar missions makes it difficult to conduct Joint Operations. TTP's should no longer be developed independently of the sister services. All TTP's must be coordinated at the joint level so that there will no longer be gaps in capability. Additionally, lessons from ad hoc missions are rarely learned because as soon as the mission is over, the services fall back into their parochial habits. Most of this problem falls squarely on the fact that there is not an over-arching joint doctrine which could incorporate and synthesize these lessons and spread them throughout all the helicopter forces.

The Case for a Joint Helicopter Doctrine

In a perfect world, a Joint Helicopter Doctrine would, in Milan Vego's words, "facilitate a common approach and enhance jointness, the services should jointly define and use key operational terms. This means that military terminology should be standardized, precise, and widely understood."[23] A good example of harmonious jointness and standing in stark contrast to the disjointed helicopter community is the jointness of Tactical Air assets.

Naval and Air Force fixed wing units routinely work together in order to develop joint tactics. For example, Air Force F-22 and Navy F-18's recently underwent test and evaluations on new ambush tactics that allow the stealthy F-22 to engage adversary interceptors that are locked on the F-18's. Air Force fighters were also included in Operation NORTHERN WEDGE, a predominately naval exercise. Here too, the Air Force and Naval

[22] Christopher D. Hayes, "Joint Helicopter Command: A DOTMLPF Solution to Capability-Based Force Generation" research paper, Newport, RI: U.S. Naval War College, National Security Decision Making Department, 2006, 8.
[23] Milan Vego, *Joint Operational Warfare* (Newport, RI: United States Naval War College, 2007), XI-12.

fighters operated jointly against aggressor squadrons.[24] Joint tactics development and pre-deployment joint training reinforces the JFACC concept. This unity of effort ensures that the JFACC can allocate aircraft to a mission based on capability rather than by service, which ensures an efficient use of tactical aircraft throughout the theater.

The purpose of developing a Joint Helicopter Weapons School and Doctrine is to ensure unity of effort between the service specific helicopter weapons schools. It will create a base line standard that each helicopter community is required to attain for certification. It will seek similarities between the core mission sets of each helicopter community and develop standard TTPs across the armed forces in these fundamental missions. This will ensure there is no gap in capability, as well as ensure that when a mission grows too large for one branch of the service to support on its own, it can easily call for forces from other branches and confidently expect the mission to be carried out as expected. The ability to bring a joint effort in support of basic mission areas will also free up special mission helicopters, "high demand low density assets," from mundane fundamental tasks so that they can be directed to perform their special niche missions.

The Joint Helicopter Doctrine will meet the intent of the 2010 Quadrennial Defense Review (QDR) in that it will increase the availability of rotary wing assets, and increase key enabling assets of Special Operations Forces (SOF).[25] Furthermore, helicopter forces aligned under the JHD will enhance senior level understanding of capabilities, thus providing the JFC with the knowledge required to better task helicopters in their command, or request capable helicopters outside of the JTF regardless of service.

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[24]James Vogel, Lieutenant Colonel, USAF, interview by author 1 October 2010. (Note: LTC Vogel was an F-22 pilot in the 422nd test and evaluation squadron)

[25] Gates, Robert. *Quadrennial Defense Review Report.* (Washington, DC: GPO, 2010), ix.

The JHD could be viewed as a precursor to true integration into the JFACC concept. Like the TACAIR communities that routinely conduct joint training, it would foster an environment that could evaluate future missions/requirements based on joint capabilities, not on service centric capabilities. Deliberate joint training would open the door for innovative tactics and capabilities a service specific force might not be capable of. Deliberate pre-deployment joint training would mitigate the risks associated with time critical, ad-hoc, missions that pop up unexpectedly. It would also be responsible for coordinating joint helicopter operations during pre-deployment training so that the joint forces would gain confidence in working with other branches of the service before being sent overseas and possibly tasked to operate in the joint environment.

Additionally, programs such as JSHIP, the 22.5 million dollar navy initiative to create ship-board capabilities for non-navy helicopters would fall under the Joint Weapons School. Programs like this would have more visibility throughout the helicopter community and may have a better chance of success because of top down integration at the joint level. .

Counter Arguments:

Some would argue that the British Joint Helicopter Command Organization would be a good model for the U.S. to use for its helicopter forces. The primary functions of the British Joint Helicopter Command (JHC) were designed to facilitate greater operational flexibility, synchronization of standards, development of joint doctrine, coordination of flight training, and harmonization of maintenance and sustainability practices.[26] Under the British JHC, it has the ability to draw upon equipment and personnel from each of the services which supply forces required to achieve operational requirements. The British JHC

[26] United Kingdom. National Audit Office, Report by the Comptroller and Audit General. *Ministry of Defence: Battlefield Helicopters.* HC 486 Session 2003-2004: 7 April 2004, 12.

essentially has operation control, and fights the force, leaving career management, administration, and personnel policy regulations, as well as flight operation regulations and engineering standards to the individual services.[27]

A fundamental success of the JHC has been a marked reduction in the duplication of deployed capabilities characteristic of the services‟ tradition of independently deploying helicopters in support of operations. When British forces deployed independently to Bosnia in 1996, they cumulatively brought 28 more helicopters than the operation required, representing 40% in wasted duplication.[28] The British JHC has allowed the helicopter forces to meet operational commitments while increasing efficiency of the helicopter forces. It also provides an integrated method to filling combat requirements based on joint capability rather than service capabilities.[29]

The British JHC certainly has increased efficiency and created availability for its services. However, under the US joint operations concept, there is no need for a permanent JHC. The current US concept of a JFC already fulfills the command portion of the British JHC. The creation of a command like the British JHC would only add another layer of bureaucracy into the joint environment.

The problem with US helicopter forces in not command and control, it is divergent TTPs. A Joint Helicopter Doctrine would be a better fit for the US helicopter forces. Designating a Joint Weapons School that overarches and aligns the independent service weapons schools, would ensure that TTPs are standardized. It would mandate joint helicopter integration during pre-deployment training. Helicopter forces operating under the

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[27] Ibid, 18.
[28] United Kingdom. National Audit Office, Report by the Comptroller and Auditor General. *Ministry of Defence: Battlefield Helicopters*. HC 486 Session 2003-2004: 7 April 2004, 6.
[29] Chris D. Hayes, "Joint Helicopter Command: The „Purple" evolution of Rotary-Wing" research paper, Newport, RI: U.S. Naval War College, Joint Military Operations Department, 2006, 14

same Tactics Manuals (TACMAN) with the same TTPs, and jointly trained prior to deployment would then be ready to rapidly fall under a JFC who has OPCON when deployed.

Additionally, The British JHC may not be scalable. The size and dispersion of US helicopter forces throughout the Continental US would hamper the consolidation of a JHC. When looking at the sheer magnitude of US helicopter forces compared to the British, one can see that a consolidated JHC with one maintenance chain and a single point training command might be impossible. With several thousand helicopters operating from a consolidated base, it could be impossible to have enough training ranges in the area to support the magnitude of flights required to train such a large force. Additionally, the cost to restructure the force in an attempt to mirror image the British JHC, would most likely be much greater than creating a Joint Helicopter Weapons School.

Others might argue that Joint Task Force Wings, an ad-hoc organization of Army and Marine Corps helicopter assets, has been very successful without the implementation of a Joint Helicopter Doctrine. "From medical evacuations with Army UH-60 Blackhawks to close air support with Marine AH-1 Cobra attack helicopters, JTF Wings has been supporting the coalition since its inception in May 2004."[30]

The Army/Marine Corps team includes units from 2nd Battalion, 25 Aviation Regiment; 1st Battalion, 211th Aviation Regiment (attack), Utah and Hawaii National Guard; 3rd Squadron , 4th Cavalry Regiment and Marine attack (773) and heavy lift (462) squadrons. "Having all these assets available has enabled commanders (ground forces) to effectively

[30] Chris Stump. Helicopters Move Operation Enduring Freedom. http://www.defendamerica.mil/articles/mar2005/a030405wm3.html (accessed 13 Sept 2010)

accomplish what they came here to do," said Colonel B. Shannon Davis, Joint Task Force Wings Commander.[31]

"Wings has been involved in just about every major operation that has gone on in Afghanistan," said JTF Wings Operations Officer Major David Francis. "It has also moved over 12 million pounds of cargo (and) 80,000 (passengers) and flown hundreds of MEDEVAC missions for U.S. and Coalition soldiers and local nationals."[32]

Indeed, JTF Wings has been very successful. It is nearly the type of force multiplier that could be generated under the JHD concept. One flaw with JTF Wings is that it temporarily deals with divergent TTPs, and when the JTF is stood down, the two forces will fall back into the TTPs mandated by their service Weapons Schools. When another ad-hoc JTF is stood up all the same issues would have to be worked out again. Another problem a future JTF may struggle with is if all four services have helicopters in the JTF. With four divergent TTPs, the problem would be compounded and more difficult to resolve.

The JHD would ensure that TTPs are aligned and all forces joint trained prior to a JTF being created. This would nearly eliminate joint integration problems, it would also increase trust and confidence throughout the JTF. The JHD would also be the clearing house for all lessons learned that flow out of joint operations. Incorporating lessons learned at the joint level would ensure that new and innovative tactics would be developed and disseminated across the spectrum of helicopter forces.

Conclusions:

Creating a centralized Joint Helicopter Weapons School, which provides joint doctrine, will prevent the services from constantly applying single minded solutions to a

[31] Ibid
[32] Ibid.

combat commanders request for forces. "This mindset must permeate all aspects of future joint and Service force doctrine, capabilities, organization, training… This amounts to nothing less than a cultural change that is essential to a more effective and coherent joint force.[33] The JHD provides a method for generating efficiency and realization of full combat potential throughout DOD helicopter forces. The JHD would serve as a catalyst that may remove parochial roadblocks that inhibit the integration of helicopter TTPs across the services. The development of the JHD will ensure a joint helicopter approach to TTP development, force tasking, and deployment. It will be the enabler which allows the combatant commander to assign the right mix of helicopter forces for the mission based on capability, not branch of service.

Recommendations:

Create a Joint Helicopter Weapons School that overarches the independent service Weapon Schools, which will produce synergy through a Joint Helicopter Doctrine

Creation of the Joint Helicopter Doctrine would ensure that TTPs are aligned throughout the forces, ensuring easy interoperability between a joint force.

Mandate joint testing and evaluations of integrated service equipment which will lead to innovative new tactics and procedures by melding together the strengths and mitigating the weaknesses of the weapons systems found throughout the services.

Mandate pre-deployment joint training and exercises in order to facilitate a joint culture.

[33] Pace, GEN Peter. The Joint Staff. Joint Requirements Oversight Council. *An Evolving Joint Perspective: US Joint Warfare and Crisis Resolution in the 21st Century*. Washington, DC: GPO, 2003, 11.

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