Close Air Support: Which Way Do We Go?

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One can hardly pick up a publication in the defense arena these days without seeing an article on close air support. The need to replace the aging A-10 ground attack fighter—the "Warthog"—has fanned the flames of a controversy that has smoldered since World War II.

In compliance with The Goldwater-Nichols DOD Reorganization Act of 1986 and in response to a congressional call to study close air support (including the feasibilty of transferring the mission to the Army), then-JCS Chairman Admiral William Crowe submitted a roles and functions report including the following statement:

> CAS is not an issue only for the Army and the Air Force. . . . All four services perform the CAS function. CAS for naval operations is assigned to both the Navy and the Marine Corps. CAS for land operations was assigned to the Air Force when it became an independent service, and the Army was permitted to maintain organic aviation with relatively unspecified tasks. All four services have CAS-capable aircraft employed under joint doctrine. In this manner we have insured that CAS is available to lower-level ground commanders on a regular basis, while still providing the theater commanders the capability to focus significant combat power in a specified area. The issue cannot be whether to transfer CAS from the Air Force to the Army; it is already present in both services, as well as in the Navy and Marine Corps.[1]

Under the new spirit of jointness ushered in by Goldwater-Nichols, the word from the Chairman sounded sensible. But wait—the Army and Air Force chiefs submitted a joint dissenting opinion:

> The Army and the Air Force do not regard attack helicopters as CAS weapons systems. Attack helicopter units lack the speed, lethality, and flexibility to enable the theater commander to mass, concentrate, or shift air support intratheater, which is a vital characteristic of CAS. We both firmly believe that the original concept of Air Force fixed-wing aircraft providing support in close proximity to friendly forces remains valid and properly defines CAS today.[2]

On 2 November 1989, the new Chairman, General Colin Powell, forwarded a new roles and functions report, reversing Crowe's position on CAS and supporting the Army and Air Force service chiefs.

Why all this energy surrounding the close air support mission? Is CAS broken? Are the customers not satisfied? Is the notion of close air support obsolete? This article will survey the close air support debate and offer a perspective.

Service Rivalry

Prior to World War II, the Army and the Navy lived separate lives, waging their own battles against "civilian isolationists, pacifists, and economizers."[3] With respect to Congress, they had separate legislation, separate service committees, and separate appropriations subcommittees. Competition between the services was almost nonexistent.[4]

Even though the Air Force had risen to a semi-independent status during World War II as the Army Air Force (including having its own member of the Joint Chiefs of Staff, General Hap Arnold), the thirst for total autonomy never really abated. Incredibly, the AAF formed a planning cell in 1943 (well before the outcome of the war was decided) to produce plans for gaining autonomy for the postwar Air Force.[5]

Central to Air Force thinking, both then and now, were the premises espoused by Giulio Douhet:

- Air power can be the decisive instrument of war.
- The decisive use of that instrument requires air superiority.
- Achieving air superiority requires centralized control of air power.[6]

Centralized control equated to being independent and autonomous: freedom to prosecute the air war as the air warriors saw fit. Yet the theory behind the need for an independent Air Force, in spite of being pushed as gospel by Air Force planners, was never proved. In fact, one could argue that it had been proven false:

> The four years of air battles across the Channel would seem to provide about as fair a test of military theory as history is ever likely to yield. But the traceable military results were uniformly disappointing. One can hardly doubt that all this death and destruction helped to prepare the ultimate German collapse, yet the United States Strategic Bombing Survey reported after the war that German war production increased throughout to reach its peak in late 1944, well after the ground armies were ashore to make good the job at which the air fleets had been unsuccessful.[7]

With the advent of the atomic bomb, an independent strategic air force became a foregone conclusion. Once the Air Force was armed with this new weapon, the drive for independence became a drive for power and

dominance in the postwar era. The 1947 National Security Act, its 1949 amendments, and the roles and missions specified by the Key West and Newport Conferences established an independent Air Force and assigned it the airlift and close air support missions in support of the Army. The Navy managed to keep its aircraft, as did the Marines.[8]

The competition would go on, however, as new capabilities and technologies emerged. Which service would constitute the strategic force? Which would control nuclear weapons? Were rockets and missiles artillery or aircraft? Whose "turf" was space? Each service had its own answers. With such fundamental issues holding center stage, one can understand the shrinking interest a support mission such as CAS might generate within a service like the Air Force, which literally was going for the moon. America's next armed conflict highlighted the Air Force's marginal interest in CAS:

> The jet fighters of the Korean War, the F-84s and F-86s, had been conceived and constructed for air-to-air battles first and as ground support aircraft a reluctant second. At lower altitudes they burned so much fuel they had little time over the target. Their guns and rockets, designed for aerial combat, were not highly effective against ground troops. Communications between air and ground had deteriorated since World War II so that as late as the second year of the Korean War, infantry and airplane radios often could not talk to each other.[9]

After the Korean War, the Air Force again pushed CAS to the back burner. As the war heated up in Vietnam, the Air Force's inability to provide adequate close air support was so bad that it prompted a congressional investigation by the House Armed Services Committee.[10] The Air Force had to borrow 25 L-19 light observation aircraft from the Army to serve as forward air controller aircraft. The Air Force had none of its own, despite the demonstrated need from Korea. It also had to borrow A-1 Skyraider attack aircraft from the Navy. And it had to convert a trainer aircraft, the T-37, to an attack plane, the A-37 Dragonfly, to carry out its close air support mission.[11]

The Army, in its frustration, developed the attack helicopter and continued to refine it. As Vietnam drew down, the Army began to adapt the helicopter to the antitank role and started work on the Cheyenne, an expensive, high-tech attack helicopter capable of carrying 8000 pounds of external ordnance, flying aerobatic maneuvers, and achieving high air speeds.[12]

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The Air Force then got worried about its CAS role and reluctantly fielded the A-10, the only dedicated close air support aircraft ever bought by the Air Force. Cheyenne was canceled. The Air Force then tried to back out of the A-10 commitment, but Congress made them go ahead with it.[13]

Carl H. Builder, in a new book on service perspectives, *The Masks of War*, concludes that

> close air support has been the most consistently neglected mission of the Air Force. Flying down in the mud instead of up in the blue and taking directions from someone on the ground are encroachments upon the freedom of flight that is so cherished by airmen.
>
> Coordinating with other airmen in a complex strike, centrally controlled by airmen, is one thing. But losing the freedom to apply air power independently to decisive ends is to lose that which pilots have striven so hard to achieve for much of the history of the airplane.
>
> Thus, close air support will always be an unwanted stepchild of the Air Force. The job will not be given back to the Army lest it create a rival air arm; and it will not be embraced because it relinquishes the central control of air power. The Air Force has the dilemma of a rival in air power or a sharing of its control, neither of which is acceptable. So the Army tries to make do with helicopters.[14]

Combat Effectiveness

Like the famous US Strategic Bombing Survey at the end of World War II, the history of CAS effectiveness, or lack thereof, is invoked to support both sides of the argument, depending on the author's bent. In 1989, Dr. Richard P. Hallion spent a year as the Harold Keith Johnson Visiting Professor of Military History at the US Army Military History Institute, where he produced a paper titled "Battlefield Air Support: A Time for Retrospective Assessment." In it, he attempted an objective historical analysis of CAS, battlefield air interdiction (BAI), and air interdiction effectiveness in combat. His analysis is thorough, timely, and neutral. Relevant points follow.

> BAI operations have always been of more value—as well as more extensive—than CAS operations. By its very nature, CAS tends to be "in extremis" air support. . . . BAI operations clearly have been more useful in their impact upon the land battle; the "Blitzkrieg," Western Desert Campaign, the Italian Campaign, breakout across France, and the epic air-land battles of the Russian Front in 1943-45 were essentially campaigns where BAI was predominant.[15]
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> Battles emphasizing CAS reflect its peculiar or more desperate nature: "Bloody Ridge" on Guadalcanal in 1942; Hellzapoppin Ridge on Bougainville in 1943; the Naktong and Chosen Reservoir fighting in 1950; outpost, column, and

hamlet defense in Indochina and South Vietnam; and siege-breaking at Dien Bien Phu and Khe Sanh. In all of these cases, CAS substituted for a lack of available artillery assets, and often to offset huge force disparities between opposing sides.[16]

Hallion postulates that "classic (non-BAI) air interdiction has proven disappointing, and of questionable value in its impact upon battlefield operations."[17] Further, he shows that command and control problems are not new, since "the single greatest recurring problem in battlefield air support has been that of effecting timely strikes with satisfactory communications, control, and coordination."[18] He also found that "the ground-to-air threat environment has always posed a serious challenge to battlefield air operations."[19]

Other interesting historical observations by Hallion include his assertions that "armies traditionally fear an enemy air force more than they respect their own,"[20] that "air forces traditionally view almost all their missions as contributing to the success of friendly land forces in battle," and that "armies and air forces traditionally bicker over the nature and control of CAS/BAI operations."[21]

Close Air Support Operations

Doctrinally, the Air Force lists counter air, air interdiction, and close air support as its fundamental "tactical" fighter missions.[22] The counter air mission receives top priority because the gaining of air superiority allows friendly air forces freedom of action to conduct the other missions of interdiction and CAS.[23]

The term "battlefield air interdiction" has only recently come into use. BAI is defined as "air interdiction attacks against land force targets which have a near-term effect on the operations or scheme of maneuver of friendly forces, but are not in close proximity to friendly forces."[24] Other terms are also popping up. Follow-on Forces Attack (FOFA) and Joint Attack of the Second Echelon (J-SAK) are new terms both of which Tactical Air Command feels are air interdiction.[25] Many writers, however, link BAI more closely with CAS and refer to them as a single mission called CAS/BAI. This usage distinguishes air attacks against enemy forces that are affecting directly or are about to affect the ground battle from those deeper attacks against enemy facilities, communications, and transportation systems. The distinction is important.

CAS applies to attacks against "targets in close proximity to friendly surface forces."[26] CAS "missions require detailed coordination and integration with the fire and maneuver plans of friendly surface forces."[27]

Air forces traditionally favor centralized control under the air component commander for "planning, coordination, allocation, and tasking."[28] Air warriors feel strongly that air forces fight at the operational level of war (as

opposed to strategic or tactical) and fear most a situation where they "just service target lists at the tactical level."[29]

AirLand Battle

The Army introduced its present doctrine, AirLand Battle, in 1981, and updated it in 1986. This doctrine revitalized thinking at the operational level (i.e. theater or campaign level) of war. The Army called its new doctrine AirLand Battle "in recognition of the inherently three-dimensional nature of modern warfare. All ground actions above the level of the smallest engagements will be strongly affected by the supporting air operations of one or both combatants."[30] The doctrine emphasizes the joint nature of modern warfare and admonishes its commanders to understand "the techniques of integrating air, naval, and ground firepower effectively in the conduct of campaigns and major operations."[31]

It is not surprising that the Army considers air forces a necessary and critical player in the execution of its doctrine. Air forces possess the theater commander's (CINC's) major capability to conduct deep operations, epitomizing agility—"speed, range, and flexibility."[32] It is interesting that most Air Force officers are quick to remind their Army counterparts that AirLand Battle is Army doctrine, not Air Force doctrine.[33] Yet, if one reads both the Army's FM 100-5 and the Air Force's AFM 1-1, he will find that the section devoted to tactical air operations in FM 100-5 (Chap. 3, pages 47-50) is duplicated word for word in AFM 1-1, complete with emphasis on counter air, importance of centralized control, and the purpose and desired effects of air interdiction, BAI, and CAS.

The Threat—and the Difficulty of Meeting It

Most of the current writing concerning CAS invariably and appropriately begins by describing the modern threat, using the central region in Europe as the worst-case scenario, and the Yom Kippur War as the last "real operational test." The Soviet system of tactical air defenses is well known. It consists of overlapping systems arranged in depth and covering all altitudes from the surface upward. The system has been modernized at an amazing rate and now includes fielded tactical missile systems numbered SA-6 through SA-19.

In the initial stages of the 1973 Yom Kippur War, the Israelis took such terrible losses in fighter aircraft that they had to abandon the CAS mission until Syrian air defenses (based on Soviet equipment and doctrine that is now 15 years old) could be effectively neutralized or suppressed. Of 109 aircraft lost by the Israelis, 61 were lost performing CAS. It went both ways: the Arabs lost 65 aircraft, out of 101 total losses, to ground air defense systems.[34]

Beyond the threat to be faced by CAS aircraft is the plain difficulty of the CAS mission itself as executed on the swirling, nonlinear battlefield

envisioned by AirLand Battle doctrine. Most CAS pilots agree that the target must be marked by some means and somebody.[35] The pilot simply cannot fly at tree-top levels, navigate, maneuver to avoid enemy defenses, keep track of friendlies, acquire enemy targets, maneuver to attack enemy targets, and live. With the proliferation of sophisticated anti-aircraft weapons in the Third World, this may even be the case in the low-intensity conflict environment.

Command and Control

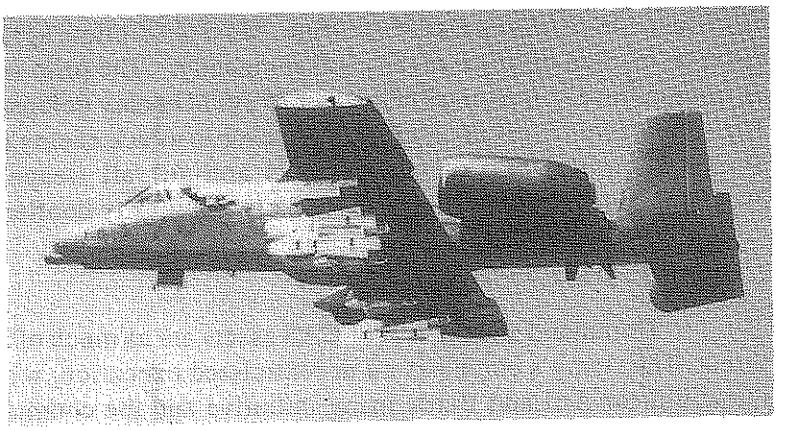
Command and control of CAS assets are as much of a problem as the threat. The Army's emphasis on decentralized execution, with units fighting the nonlinear AirLand Battle using initiative and the commander's intent as guidance, makes responsive support by the centralized control methods of the Air Force difficult, to say the least.[36] The Forward Air Controller (FAC) is a problem. Ground-mobile now because the threat has negated the flying FAC, "his ability to assist the fighters in target location and identification [is] significantly reduced."[37] Most agree that the present FAC system is inadequate, and any improvements in aircraft have to include improvements in the FAC/fighter interface.

Integrating a CAS attack into the swirling combined arms battle is also no easy task for the ground commander and his staff. If a ground maneuver is going well, it is often easier to scrub the fighters than shut down everything so they can attack. If the ground units are in trouble, command and control are usually also breaking down; thus setting up the fighter attack "by the book" may be impossible.

The Aircraft

The spark that rekindled the CAS debate was the need to replace the aging A-10. There is little consensus on which aircraft should replace the A-10, or even whether the A-10 should be replaced at all. Many like the notion of a dedicated CAS aircraft and would prefer to upgrade the A-10 or adopt the Marines' AV-8B, thus retaining the "flexibility and responsiveness of rugged, forward-based aircraft."[38] Others argue that a multi-role fighter, one that can accomplish the additional tactical missions of counter air and interdiction, makes the most sense, both economically and operationally. The Navy's F/A-18 falls into this category and is already in production.[39]

An adapted F-16 (A-16) seems to be the Air Force favorite, but an upgraded A-7, the A-7+, has also been studied.[40] More than a few authors say the modern helicopter is the right CAS aircraft.[41] One point no one argues over is the cost. A fixed-wing, close air support aircraft that can cope with the threat, accomplish the mission with accuracy in adverse weather or darkness, and has the command and control, navigation, and pilot-workload-reducing



The A-10 Warthog. A recent *Washington Post* dispatch from Saudi Arabia optimistically proclaimed of its potential use: "Here, this homely toad of a plane has emerged a prince, a mighty tank-killer that will slay Iraqi armor in its tracks."

systems necessary to rapidly and flexibly integrate itself into the battle at the front line is the most expensive fighter one can buy.

Is CAS Broken? Ask the Customers.

Judging from the literature, it appears that CAS is, indeed, broken. In the mid- to high-intensity environment, air defense systems in the vicinity of the front line have rendered our current CAS fighter, the A-10, non-survivable. The difficulties of target acquisition, low-level navigation, accurate situation awareness, and adverse weather and darkness have not been overcome. The integration of air and ground forces at the tactical level is in bad shape, including the forward air controller system, communications, target location means, and responsiveness.

The Army views land combat as central to war, and closing with and destroying the enemy as central to land combat. The infantry and armor mudsoldier has the "close with" role. All other branches of the Army, as well as the other services, are in support of the mudsoldier and his decisive mission.

> The soldier views the enemy army as the prime focal point of war, and all else should properly be subordinate. The soldier is impatient with the navy when the navy finds tasks that might interfere with taking the soldier where he wants to go, where the enemy camp is, and keeping his supplies coming steadily. He is impatient with the airman who wants to put a machine tool factory out of business; he wants the airman to work on the enemy tank across the valley from him. And the soldier, few men realize, is the only one of the military men who cannot do his part of the war alone. . . . His flanks are bare, his rear is vulnerable, and he looks aloft with a cautious eye.[42]

His is the ultimate commitment. The soldier generally lives in close contact with the enemy and is therefore in constant danger and in mostly uncomfortable conditions. He does not view himself or his men as expendable. When he engages in battle, he is usually decisively engaged—that is, he wins or he dies. He expects all those supporting him to commit themselves as fully as he has to in accomplishing the mission. The soldier cannot simply RTB (return to base); he cannot stop at night or in bad weather.

Few of today's tactical commanders, brigade and below, have much confidence that CAS will play a major role in their part of the battle. First of all, no ground commander in his right mind would commit himself to mortal combat relying on a key weapon system that might or might not be there. Within the current system, a particular ground commander could get out-prioritized in at least three ways. First, the air-to-air battle in general or in another region would have doctrinal precedence. Second, the interdiction campaign might cut down on the sorties allocated to CAS. And finally, another ground commander may be deemed in more trouble or have a more important mission in the operational scheme of things.

Should luck smile on our particular ground commander and he be allocated CAS, the vagaries of weather, light, and timing may degrade his ability to effectively employ CAS. If our ground commander finally hears the call of a couple of fighters as the battle rages, he has a difficult coordination drill to go through under a severe station-time constraint: shut down or shift artillery, mark friendlies, pick and identify targets—all for four or six bombs and some 30mm, and maybe a Maverick missile.

Is it any wonder that most ground commanders have the nagging feeling that they will never see CAS, and would never count on it as a decisive factor even in planning? With the A-10, a CAS-only aircraft, at least someone was going to get CAS—if it was daylight and the weather was good.

Despite the gut feelings of many in the Army that the Air Force is not truly dedicated or committed to the CAS mission, there are fully nine fighter wings that train full-time to do it,[43] and others maintain CAS as one of several missions. The pilots and airmen involved in Air Force combat duties are every bit as brave and committed as the mudsoldiers. Unfortunately, fat pay incentives; big officers' clubs, golf courses, and swimming pools; reams of regulations keeping dirty Army vehicles from being loaded onto pristine clean aircraft; and mission halts for crew rest are what the mudsoldier remembers most about the Air Force.

The Few, The Proud, The Marines

If close air support is indeed broken and the customers are not exactly satisfied, what are the alternatives? A prominent alternative espoused by many writers is to turn the mission back over to the Army and do it like the Marines.

The Marine "air force" includes aircraft covering the entire tactical spectrum: helicopters of all types, including attack helicopters; fixed-wing fighters; and airlift/aerial refueling assets. The large number of fixed-wing fighter aircraft owned by the Marines is justified by the lightness of Marine ground forces and their lack of heavy artillery or other fire support means.[44]

An examination of Marine air doctrine shows that it is quite similar to that of the Air Force, e.g. establishing air superiority is the first order of business, and centralized control with decentralized execution is desirable. There is one noticeable exception—the Marines' emphasis on close air support. Rather than a last-priority mission, CAS is the *main* mission, with air superiority de-emphasized but still a necessary prerequisite to both amphibious operations and CAS, as well as other air operations.[45]

The Marines' claimed need for such a robust air support system could be challenged. Naval air could provide required support until the shore situation was stable enough to bring in Air Force tactical air support. Lack of artillery is compensated for to some degree by naval gunfire support. Certainly artillery is cheaper to buy and support and easier to move than jet fighter aircraft and their necessary support systems. The reason the Marines maintain the air capability they do is the same reason any commander would if allowed—dedicated, flexible, far-ranging, potent, reliable, organic combat power that fights (and wants to fight) your fight—not prosecute an independent air campaign or stay aloof at the "operational level."

Passing CAS?

More than a few authors, many of them Air Force, have advocated transferring CAS to the Army.[46] If CAS were unloaded by the Air Force, it would relieve them of a dangerous and low-priority mission. It would also save them money. As we have seen, a CAS fighter is the most expensive fighter aircraft there is. The systems necessary to effectively command and control CAS in the high-threat environment are also going to be costly in both hardware and personnel. The notion becomes more attractive still as air commanders, operating on broad mission guidance from the CINC, pursue their independent air campaign at the operational level, leaving ground commanders to their tactical troubles.

It sounds good. The Army tailors itself as an independent, self-contained, combined arms, land fighting force (Marine-style), completely owning and fighting a land theater of operations. The Air Force becomes the strategic force (bombers, missiles, inter-theater airlift, and strategic reconnaissance), pursuing space systems and other technological frontiers on which the Air Force has always sought leadership. It fits nicely their service persona.

But is it in the Army's interest to take over CAS, much less all of tactical aviation? No. The Army cannot afford the force structure it desires now, nor the

modernized tanks and helicopters it needs. The size and expense of CAS, not to mention all of Tactical Air Command, is enormous—aircraft, pilots, mechanics, bases, training centers, simulators, ranges, research and development, and more. The near term would see more force structure and dollars to support a transfer of roles, but as the Air Force opened new frontiers and pursued these with the effectiveness they have always shown in garnering budget support for their systems, the pie would eventually be back to its traditional tripartite division and the Army would be trying to do a lot more but with its old budgetary allotment. The trade-offs and compromises necessary to support an Army Tactical Air Command or even just a CAS apparatus would result in an overall loss in combat power—probably a significant loss as land formations were traded off with fighter wings. The Army will clearly end up with more forces in support of the land campaign if it makes the Air Force fulfill its assigned roles and functions and meet the Army's CAS requirement.

Is it in the Air Force's interest to give the CAS mission to the Army? In an era of shrinking defense dollars and emphasis on joint service operational capability, the CAS role, especially if a multi-role fighter can be wrangled as the replacement for the A-10, will preserve Air Force force structure and even justify more high-tech equipment for their aircraft. The same command and control systems that are needed to upgrade CAS capability will also upgrade the capability of the more favored missions of air interdiction, BAI, and counter air. Thus it would not appear to be in the Air Force's interest to pass CAS.

Can Attack Helicopters Fill the Bill?

With the ever more lethal air defense threat, the historical finding that BAI rather than CAS has been the more effective mission, the ever-escalating costs of the CAS system, the increasing sophistication and capability of helicopters, and other rapid changes affecting the air-land interface, one must ask whether fixed-wing close air support is obsolete. And if the answer is yes, then could attack helicopters do the job?

There are numerous eloquent arguments in the literature for the CAS function to be handled by the Army's organic attack helicopters.[47] Helicopters have some clear advantages over fixed-wing fighter aircraft. They can more effectively use terrain to mask themselves from detection and enemy weapons, although they must generally expose themselves to employ their own weapons. This last problem is partially offset by the increasing range of stand-off weapon systems. At the present time, helicopters have a decided edge over fixed-wing aircraft in night and adverse weather conditions. Basing requirements and support systems are lean and flexible for helicopters as compared to jet fighters. In general, a modern helicopter is cheaper than a CAS-capable modern fighter.

The organizational effectiveness gained by single-service forces as enjoyed by the Marines accrues to Army attack helicopters. The Marines,

however, have their choice of systems and use both. Why not just helicopters? Helicopters do not have the speed, range, or load carrying capability of fixed-wing fighters. Helicopters are more efficient tank killers, but cannot perform strike, interdiction, or defensive air operations on a par with fighters, if at all.

The air defense threat at the Forward Line of Own Troops is equally tough for both types of aircraft. Although the helicopter can mask, sneak, and peek, it is more vulnerable to small arms, artillery, and even tank main gun fire. Mock battles at the National Training Center have shown that attack helicopters used head to head against enemy forces at the forward line are ineffective. When properly employed, that is, used as maneuver forces to attack the enemy flanks and rear or in depth, their effectiveness increases dramatically.

Attack helicopters are not considered CAS systems in the Army's view, and justly so. They are not even considered fire support systems. Attack helicopters are found in only two types of units in the Army: attack helicopter battalions and cavalry squadrons or regiments. These are combat arms maneuver formations, and Army doctrine is absolutely clear on this point despite the occasional artilleryman who still wants to count them as flying artillery. Richard Hallion's history of air support correctly points out that the attack helicopter is "an airborne armored fighting vehicle, and in intent and purpose is more closely related to the tank than to the airplane."[48]

How About Future Systems?

Work on new weapons never ends, and efforts to enhance the close air support system are ongoing. One joint Army/Air Force system, the Joint Surveillance and Target Attack Radar System (JSTARS), currently under full-scale development, will aid targeting and, along with the Joint Tactical Information Distribution System (JTIDS), will aid command and control.[49] These capabilities will help commanders set priorities, decide how to attack enemy forces, and concentrate the right combat power, but they will do little to alleviate the difficulties associated with the execution of the actual CAS mission. They do offer potential substantial improvements in BAI effectiveness. The services are also getting heavily involved in remotely piloted vehicles (RPVs) or unmanned aerial vehicles (UAVs).[50] These have great promise as weapons, weapon platforms, intelligence gatherers, sensors, target designators—you name it. They can be cheap compared to a modern fighter *and* its pilot.

The Army's modernization program is concentrating on weapons and other systems with greater range, allowing deeper targeting and attacks—Multiple Launch Rocket System (MLRS), Army Tactical Missile System (ATACMS), and Sense And Destroy Armor (SADARM), to name a few. The emphasis is on smart, brilliant, and genius weapons, all trying to achieve greater depth, stand-off, and probability of kill.

At some future date, close air support may indeed become the least economical means for providing fire support, *but that day is not here yet.* CAS capability, even in a multi-role aircraft, will always be an attractive, flexible option.

Politics

What implications do the Conventional Forces in Europe (CFE) negotiations and budget-induced defense drawdowns have on this issue? Fewer fighter aircraft in the aggregate is one obvious outcome. Fewer aircraft would seem to favor a multi-role fighter over a single-mission CAS aircraft. The Air Force might even change its stance and opt to give away the CAS mission so it could afford the B-2 and the Advanced Tactical Fighter. Talk of stopping the F-16 buy to save ATF is already being heard. Does that mean the A-16 (a version of the F-16 adapted for CAS) is no longer a CAS option? Or would the Air Force retrofit CAS mission packages on existing F-16s? That ploy might save some force structure.

If the disappearing Soviet threat in the central region permits defense spending to be slashed while contingency forces for other regions—e.g. the Persian Gulf—grow in priority and interest, has the CAS requirement changed? Our last large-scale low-intensity encounter, in Vietnam, brought back the prop-driven A1-E, produced the low-cost A-37, and had much to do with the design of the A-10. With a less dense air defense threat, isn't the existing A-10 just what the doctor ordered? Or does the prospect of high-intensity tank warfare in the deserts of Kuwait and northeast Saudi Arabia raise the same spectres we faced across the Elbe?

These developments and the questions they evoke definitely play in the broad CAS debate, but none of them renders the close air support mission obsolete. The battlefield endlessly grows in lethality, depth, and tempo. The attack jet aircraft characterized by speed, range, and flexibility has not seen its last close air support mission.

A Closing Perspective

Roles and functions allocations over the years have not followed any specific logic other than a series of compromises to give each service a piece of the action. The Navy, after all, has its own army and air force. Service roles and functions, although debated, have remained stable for several decades now. As Carl Builder points out,

> Whatever the logic or merit of revisiting the Key West Agreements, it is a simplistic answer to an enormous problem now rooted in the nation's institutions, history, and responsibilities. Though realigning the service roles and missions may be the "right" approach, it almost certainly is not the workable approach.[51]

Further, a little service rivalry has some benefits. Competition always fuels creativity and generates options. Rather than duplication, it may produce weapon systems and warfighting capabilities that add depth, robustness, and redundancy, increasing overall strength and effect. On balance, then, maintenance of current roles and functions is in all the services' best interests. Helicopters alone are not sufficient, while passing CAS to the Army is simply not practical.

In all spectrums of conflict, close air support is still an essential mission, although it is increasingly blurred with BAI. The systems necessary to improve CAS, both in terms of aircraft and of command and control, will perhaps enhance BAI capability as much as or more than that of CAS. Given AirLand Battle doctrine and Army fire support weapons in development that add power, depth, and accuracy to the ground commander's arsenal, BAI appears to be emerging as a more important mission than CAS. Historically BAI has had more effect than either CAS or traditional air interdiction. Taken together, these arguments favor a multi-role fighter as the next CAS aircraft. Fixing CAS is going to be an expensive proposition. But the systems—JSTARS, JTIDS, etc.—have applications for both services beyond CAS and, with joint support, have a better chance to reach fruition.

So, our leaders are right. Our current position and efforts make the most sense. However, there is still one glaring deficiency. The Air Force needs to mount an all-out attack to dispel the perception that it doesn't care to get dirty helping its Army brothers down at their lowly tactical level. As long as this perception exists, there will be calls to change roles and functions, ill-will, and plain open distrust. Even the Congress sees a perceived disdain on the part of the Air Force for CAS. Why else would they order a study on a change of roles? Come on, Air Force! Get down, get funky!

NOTES

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