

USAF is locked in a battle with the other services over the management and operation of unmanned vehicles.

The Drone War

By Rebecca Grant



Readying an Air Force Predator for takeoff.

In the Global War on Terrorism, Air Force Predators and other unmanned aerial vehicles are constantly in action. They have become principal providers of critical intelligence-surveillance-reconnaissance data and have played a combat role, too. Now, Washington is in the grip of an unusually nasty and public war over who will have responsibility for medium- and high-altitude UAVs.

Gen. T. Michael Moseley, Air Force Chief of Staff, touched off the conflict on March 5 by distributing a memo to Deputy Defense Secretary Gordon England, the Chairman and vice chairman of the Joint Chiefs of Staff, the service Chiefs, and all the theater combatant commanders. (See “Editorial: A Better UAV Flight Plan,” April, p. 2.)

The memo proposed that the Air Force take over as executive agent for all UAVs designed to operate at or above 3,500 feet. If approved, the move would give USAF significant control over the development, planning,

funding, and operational concepts for unmanned aircraft, defensewide.

Army Brig. Gen. Stephen D. Mundt, director of aviation for the Army’s deputy chief of staff for operations and plans, fired the opening shots in an interview with *Defense Daily*. “We absolutely disagree, and every other service does, too, and the Joint Staff does as well,” Mundt said.

“Someone explain to me when a line in the sky became a service core competencies [sic]. My helicopters fly above 3,500 feet,” Mundt continued. “That does not mean they belong to the Air Force.”

Air Force Brig. Gen. Jan-Marc Jouas, commander of the Air Intelligence Agency, shot back in a March 28 service commentary. Mundt “recently disparaged” the Air Force’s efforts to improve ISR and UAV capabilities, Jouas wrote. “Mundt’s caustic comments, reminiscent of an era prior to the maturation of jointness and service interdependence, would have been better aimed at reducing competing UAV programs and mission redundancies.”

Mundt described the Air Force plan thusly: “You give me the responsibility for everything above 3,500 feet, I’ll sign up for a \$15 billion program and cover everything that needs to be done.” Mundt added, “The fact is, they can’t.”

“A lot of us were just flat caught off guard,” claimed Mundt.

“This issue is not a surprise,” said Lt. Gen. David A. Deptula, Air Force intelligence director, in an interview with *Air Force Magazine*. “The Army and the Air Force have been talking about this subject over the last two years.”

Indeed, the Air Force two years ago had formally proposed that it be given UAV executive agency, but the Joint Staff shot down the idea at that time. (See “Washington Watch: The UAV Skirmishes,” June 2005, p. 11.)

In his controversial memo, Moseley proposed a plan to increase the interdependence of medium- and high-altitude UAVs “beginning with establishment of the Air Force as executive agent (EA) for them.” The proposal encompassed five primary ISR platforms: USAF’s MQ-1 Predator, RQ-4 Global Hawk, and MQ-



USAF photo by SSgt. Jeremy T. Lock

9 Reaper; the Army's MQ-1C Warrior; and the Navy's Broad Area Maritime Surveillance (BAMS) system. Smaller UAVs designed to operate with units and at lower altitudes were not part of the proposal.

Moseley proclaimed a need for a joint, theaterwide ISR strategy for everything flying above 3,500 feet. High on the list of benefits was a potential savings of around \$1.7 billion to be gleaned from executive agency consolidation of the various programs.

End the "Stovepipes"

"It is reasonable to expect that the present [medium- and high-altitude] UAV investment budget could be reduced perhaps by up to 10 percent," stated an Air Force fact sheet. "DOD cannot afford the inefficiencies that result from individual service UAV stovepipes." (The word "stovepipe," a pejorative term, refers to an artificial walling off of an activity so as to prevent the involvement of others outside of the organization.)

Of specific interest to the Air Force is a potential merger of the closely related Air Force Predator and Army Warrior programs, and a similar consolidation

of the Air Force Global Hawk and its Naval sibling, the BAMS. USAF's plan would transfer procurement authority for all of these systems to the Air Force to save on costs, eliminate duplication, and direct investment to areas where it would be most useful.

Army objections stem from a belief that its systems need to be developed by ground force personnel (otherwise, they might not be suitable to ground force needs) and under tactical control of ground force commanders (otherwise, they might not be available at times when Army units need them).

The Air Force in recent years has been expanding its UAV capabilities. For example, it led the development of the Remotely Operated Video Enhanced Receiver, or ROVER, the popular laptop downlink system. Using this method and hardware, the Predator can push its video data down to battlefield airmen, special operators, and soldiers in the field.

To Moseley, "designating the Air Force as the EA for medium- and high-altitude UAVs is the step we can take now to increase combat effectiveness" worldwide.

"If I sound emotional about this, it's because I believe there is a way to fight a joint and coalition fight much more effectively, much more efficiently, and afford these systems," Moseley told a group of defense writers in April.

The Army's Mundt countered with the case of the Army Shadow. Shadow is a light, tactical UAV with a range of some 75 miles. It is designed to give about four hours of coverage over a brigade's full area of interest. Shadow shapes up as "the eyes and ears" of a commander in a tactical fight. It has a service ceiling of 16,000 feet. "Under their plan," said Mundt, "I give them the Shadow, [and now] I have to put my request in and compete to get that same capability back, which is ludicrous," Mundt fumed.

The institutional Air Force is, of course, not seeking to micromanage actual use of the UAVs; operational control would go to the air component commander at the combined air operations center in a combat theater, the best place to centrally coordinate and parcel out the capabilities. The air boss is usually, but not always, an Air Force officer, and he answers to the theater commander, not to service officials.

The Air Force believes that executive agency would provide a coordination benefit. "All UAVs operating above

the designated coordinating altitude must have common, interoperable systems to facilitate ... safe and seamless operations," explains an Air Force fact sheet on the subject. "As EA for MHA UAVs, the Air Force would be postured to integrate these requirements into the UAV programming and acquisition process at the outset."

The Army immediately took the point in resisting the Air Force plan. Yet the first reactions from the Navy and Marine Corps were not warm, either. "I've seen the memorandum," Adm. Michael G. Mullen, Chief of Naval Operations, said March 29. He suggested further discussion, adding, "As I read it, I'm not supportive."

The JCS Chairman, Gen. Peter Pace (a Marine Corps officer), lent partial support. "It makes absolute good sense to me that things flying above 3,500 feet should be part of an ATO, air tasking order, so that there's deconfliction of the airspace," he told Washington reporters in April.

His support came with a caveat: Pace said that different armed forces would need different payloads on UAVs, so "we need to be careful not to override the needs of the troops on the ground by some kind of a generic package."

After the initial furor, Moseley reopened the debate. Referring to some of the previous comments from members of other services, he raised the prospect that "what their staff says, or what some people say in an emotional moment, may not necessarily be what a service Chief thinks." The real debate is about "meeting the joint land, maritime, special ops commanders', [and] component commanders' requirements," Moseley went on. "This is no different [from] close air support."

The heart of the issue is how to provide responsive ISR for a wide range of users. Here, the Air Force believes it has a compelling case for better authority.

Predator combat air patrol orbits have risen dramatically over the past several years. They doubled from six aircraft airborne at all times in 2001 to 12 in 2007, with a plan to reach 21 CAP orbits in 2010. Meanwhile, additional orbits are dedicated to special operations forces and to other government agencies, such as the CIA.

Lt. Gen. Michael W. Wooley, commander of Air Force Special Operations Command, noted in May that he has a requirement for 30 Predator orbits a day in the US Central Command area and that the military is "having a hard time"



USAF Chief of Staff Gen. T. Michael Moseley, shown testifying on Capitol Hill, touched off a firestorm with his UAV proposal.

reaching half that number. The UAV resources are all badly stretched.

Deptula explained, “When you get into the medium- and high-altitude systems, like Predator, like Global Hawk, there are a finite number of systems that we have available today.”

Given this situation of scarcity, the big question comes down to this: Who will provide ISR to the Army’s tactical units? The Army says it should. The Warrior UAV, an enhanced Predator derivative, gives the Army an organic capability. Warrior could operate at altitudes up to 25,000 feet and remain airborne for as long as 36 hours. The Army wants to buy up to 132 of these extended range, multipurpose UAVs.

The problem is that the Army Warriors are available for tasking through the land component only. If this approach were taken to its logical conclusion, every division might own its medium-altitude UAVs for ISR and strike operations, but it would make none available to any other division. Warrior UAVs would deploy as part of a division’s equipment set, just like Stryker vehicles, and then rotate home with the rest of the force.

Thus, assigning medium-altitude UAVs such as Warrior to ground units takes those valuable platforms out of the pool for joint ISR and unmanned strike operations. “Part of the frustration now,” said Deptula, “is that not every unit on the ground gets Predator video all the time. That’s because of the rack and stack of the priorities.”

Don’t blame the Air Force—the problem lies with the joint system. The process for allocating Predator coverage

begins with the joint combatant commander. “Every operational Predator that the Air Force has is currently assigned to Central Command,” said Deptula. The joint force commander, through the air commander, “divvies those up between ... major areas of operation, principally Afghanistan and Iraq.”

Needed: Central Allocation

Next, the joint task force commanders for Afghanistan and Iraq—both currently Army general officers—set priorities for UAV tasking, then hand orders down to the joint force air component commander for execution.

“The system we have allocates medium- and high-altitude UAVs to combatant commanders to execute, and it

works very, very well,” Deptula said.

Deptula said the goal is “ensuring that small units have the most responsive ISR coverage that is physically possible.” And in that respect, Army ownership would make responsive assignment harder, not easier.

“Folks at organic levels, at small unit levels within the Army, want to have control of their own Predators, because of the information that it provides,” Deptula explained. Predator, however, does not cover a wide swath of the theater: It’s famous for its “soda-straw” view of the world, which is big on detail but narrow in aperture. Covering a dispersed battle area in detail takes a lot of assets.

Central allocation is the key. “Any particular small unit might only need the ability for a certain number of minutes [of coverage] out of every hour,” Deptula said. “But by virtue of the fact that the unit owns it, they’ll keep it occupied.”

One division might hoard its UAVs while another division had a greater need for that capability. Under JFACC control, commanders are able to better shift around the assets to meet combat needs.

Airspace management is another benefit of centralized control. The problem of collisions is growing steadily. Although most near-misses happen at low altitudes, where hordes of small UAVs are buzzing around, Wooley noted that he “loses sleep” over the prospect of “beak-to-beak” collisions between his SOF aircraft and unmanned aircraft. The mid- and high-altitude UAVs in question regularly operate in the airspace where AFSOC normally flies.

Today, only CENTCOM has the Predator in regular operation, but other



Centralized UAV allocation is key, says Lt. Gen. David Deptula (l), deputy chief of staff for ISR. Here, Deptula meets with Brig. Gen. Charles Shugg, head of the 379th AEW in the Gulf.



combatant commanders want them, too.

The MQ-9 Reaper is of particular interest in Korea. Gen. Paul V. Hester, commander of Pacific Air Forces, has said he would like to base some of the UAVs on that heavily armed peninsula. In some scenarios, the Predator, Reaper, and other UAVs may go into action without ground forces. There is risk in limiting access to a major share of the nation's medium- and high-altitude UAVs by locking them into the Army force structure.

Ground commanders will not back off from their need for responsive ISR, because it is central to current operations and to future force concepts. It may be up to the Air Force to demonstrate how UAV executive agency can save money and better deliver combat capability.

Deptula drew an analogy. "GPS [the Global Positioning System] is 100 percent owned and operated by the Air Force, yet its effect has become so ubiquitous that it's depended upon by all the services without any concern. We can do that with medium- and high-altitude UAVs," he testified in April.

At least two combatant commanders are strong supporters of the USAF plan. Adm. Timothy J. Keating, head of US Pacific Command, told Congress he believes the Air Force is the best choice to be executive agent for fielding and integrating and operating UAVs. A week later, the Air Force got support from Marine Corps Gen. James E. Cartwright, commander of US Strategic Command, who declared, "I would agree with Admiral Keating."

"I know that people that wear this uniform may not agree with me," said



Top, soldier prepares to launch a Shadow, an Army UAV tied more or less exclusively to a brigade's operations. Above, the Army's disputed MQ-1C Warrior, which can reach 25,000 feet altitude.

Cartwright, referring to other members of the Marine Corps, but Air Force executive agency, in his opinion, was "exactly right."

Deep Roots

Chairman Pace left the door open, too. "It's not a bad idea to take a look at all UAV operations to see who ought to be on the control stick, so to speak, for those operations. And if that's a place where the Air Force could free up Army troops to do other things, it's worth a discussion." This willingness to discuss the issue was significant, for it was Pace, as vice chairman of the Joint Chiefs, who signed the memo rejecting the Air Force's previous EA proposal in 2005.

Today's UAV imbroglio has its roots in problems left unsolved during the rush to develop multiple UAV systems in the 1990s. The US military began using UAVs routinely during conflicts in the Balkans. The Air Force led breakthrough developments in combat employment. "Remember, it's Air Force initiatives and Air Force programs that brought

us the laser on the UAV, that brought us the big sensor suite on the UAV, that brought us an armed UAV, that brought us the ROVER ground station," said Moseley.

Critics in the 1990s usually urged the services to speed up. "Members of Congress and segments of the defense community have criticized DOD for its seeming inability to develop and field a tactical UAV," charged the Congressional Budget Office in a 1998 report. And during NATO's Kosovo war of 1999, USAF accelerated Predator systems to provide better target coordinates. The

Balkan postwar stability operations saw the Army bring in Hunter UAVs, while Marine Corps Dragon Eyes saw action, too. Most complaints in those days centered on the need for more.

Soon after, the Joint Requirements Oversight Council began deconflicting some service programs. The JROC directed the Army and Navy to pursue tactical needs in different ways, a move leading the Army to field the Shadow. By then, as CBO pointed out, there were budding concerns about cost and control.

"When the demand for UAVs outstrips their availability," said CBO, "the needs of tactical commanders may be sacrificed to those of higher echelons. That would probably not happen if the tactical commanders had their own, exclusive UAV systems."

Unity was not on the agenda. The Army moved swiftly to expand and develop its own unmanned systems as its appetite for UAVs grew. Ground warriors took a traditional view of the upstart platforms. The main mission for UAVs would be surveillance. Brigade



or division commanders would put UAVs over their unit's operating area and move the UAVs forward with the ground maneuver unit. Army-owned UAVs could provide intelligence, spot targets, and feed damage assessments back to headquarters.

The notion of division-controlled surveillance was irresistible. Tests in Army wargames at the National Training Center made soldiers quick converts. "I will give up a tank battalion for a UAV company," Maj. Gen. Paul J. Kern, commander of the 4th Infantry Division, said after a 1997 exercise.

By 2001, the Army was programming for multiple unmanned systems to support ground maneuver commanders. Experience in Afghanistan and Iraq further increased the Army's appetite for the systems—and for ownership.

Major impetus for UAV development came from Operation Anaconda, an unsuccessful March 2002 Army-led operation staged in Afghanistan. In Anaconda, Army troops were inserted into high mountain landing zones only to be attacked by al Qaeda fighters based nearby. "If we had had more UAVs on landing zones prior to us going in there, we would not have had this problem," noted Lt. Gen. Robert W. Noonan Jr., head of Army intelligence. "We don't have enough organic UAVs," Noonan told *Defense Daily*. "We feel very strongly that all of our brigades have got to have UAVs."

"Infantry, scout, intelligence, aviation, artillery, maneuver, and even medical units benefit from the availability of UAVs," claimed a 2004 brief prepared by the Association of the United States Army.

Then, in 2005, the Army set up a UAV Center of Excellence at Ft. Rucker, Ala., its goal being to "ensure that all Army UAV activities are cohesive,

request was made shortly thereafter. It drew immediate fire from the other armed services, and Jumper retreated a bit. Referring to executive agency, Jumper said, "Let's not use that [term], but let's get everybody under the same roof and make sure [we are] organizing these things so we can get them where they are needed."

USAF's request was denied on July 5, 2005. The Joint Staff instead ordered the creation of a Joint UAV Center of Excellence at Creech AFB, Nev. The Air Force moved to support the new joint center, which sprang up a few blocks from USAF's UAV battlelab.



USAF's RQ-4 Global Hawk (top) and MQ-9 Reaper (above) outclass other UAVs, but the Army, Navy, and Marine Corps all are bent on acquiring and operating their own variants.

coordinated, and in support of current and future warfighting requirements," Brig. Gen. Jeffrey J. Schloesser said at the time.

Airspace Problems

By that summer, a total of 574 UAVs of all types and from all services were operating in Afghanistan and Iraq. Most of them, however, were tactical systems belonging to the Army. (See "The Chart Page: That Giant Droning Sound," March, p. 10.)

Airspace was becoming a problem. "We've already had two midair collisions between UAVs and other airplanes," said Gen. John P. Jumper, then USAF Chief of Staff. "We have got to get our arms around this thing."

The Air Force's first executive agency

(See "Smashing the UAV Stovepipe," February 2006, p. 50.)

Things rocked along for the next two years, but, by 2007, looming operational and fiscal problems made it impossible to put off a search for a permanent solution. Specifically, it was the mounting overlap between Predator and its Warrior variant—both in operations and in acquisition plans—that forced the issue.

The Air Force is ready to keep taking the heat generated by the UAV imbroglio. The service is "dead serious about UAVs, and dead serious about delivering this effect to the joint force commander," said Moseley. Still, more than two years after this matter became an urgent program, it is still unclear if or when the Air Force actually will take control of UAVs. ■

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