



## IN MY VIEW

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### THE AIR FORCE IS ALREADY TRANSFORMED

Sir:

Transformation is a new defense buzzword, and Tom Mahnken addresses it [Thomas G. Mahnken, “Transforming the U.S. Armed Forces: Rhetoric or Reality?” *Naval War College Review*, Spring 2001, pp. 85–99] with some useful ideas. Although he never defines what precisely is a “transformational weapon,” he implies in his first sentence that such weapons should incorporate stealth, precision, and information technology. He often refers to space.

I don’t know if the Army, Navy, or Marine Corps are transforming themselves, so I’ll confine my comments to the U.S. Air Force.

After DESERT STORM the Air Force disestablished the Strategic Air Command because it was a vestige of the Cold War. That act would be roughly comparable to the Army disbanding the infantry branch. The Air Force also led the way into four key technologies—stealth, precision-guided munitions (PGMs), C4ISR\*, and space—the areas that Mahnken implies signify a commitment to transformation.

There are only two operational stealth aircraft in the world, the Air Force’s F-117 and the B-2; the F-22 will be the third. In DESERT STORM, the Air Force dropped over 90 percent of all air-delivered PGMs. Over Bosnia and Kosovo its share was approximately 60 and 70 percent, respectively. There are no other aircraft anywhere that can command and control the air and land battle with the speed, accuracy, or breadth of AWACS and JSTARS.† The United States has the largest, most sophisticated, and most comprehensive space program in the world. The Air Force currently contributes over 90 percent of the assets, over 90 percent of the funds, and over 90 percent of the personnel to U.S. Space Command. If stealth, precision, information, and space define transformation, as Mahnken says, the Air Force is already transformed.

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\* C4ISR: Command, control, communications, computers, intelligence, surveillance, and reconnaissance.

† AWACS—Airborne Warning and Control System (the E-3 Sentry); JSTARS—Joint Surveillance and Target Attack Radar System (the E-8C).

Nonetheless, Mahnken singles out unmanned aerial vehicles (UAVs) and argues that, first, they are transformational weapons currently underfunded, and second, that the Air Force has deliberately thwarted their development. The first assertion is debatable, and the second is offered without evidence.

UAVs are not new. They were used extensively in Vietnam and have been in most conflicts since, but they have had a mixed track record. No UAV has ever delivered a weapon in combat. They are expensive. The Air Force's new Global Hawk will cost fifteen million dollars—for the airframe. With a payload, the cost is forty million—more than a new F-16. UAVs are also vulnerable. Nato lost more than twenty over Serbia in 1999 (a relatively benign environment), two were downed over Iraq this past September, and two (at this writing) have been lost over Afghanistan. One reason for these losses is that UAVs are far less mechanically reliable than manned aircraft. That is why the Federal Aviation Administration refuses to allow them to fly in U.S. civil airspace. It's simply too dangerous. In addition, while the great advantage of UAVs is their ability to go into high-threat areas without risking valuable aircrews, their great disadvantage is that accordingly they often get shot down. Expect heavy, and costly, UAV losses when we use them in combat. UAVs are important for the future; hence, the Air Force has pioneered in their development. But there are serious problems with the technology—stability, control, situational awareness, performance, flexibility, bandwidth availability, payload, and vulnerability—that must be solved before they can replace manned aircraft.

As for the charge that the Air Force has deliberately retarded UAV development because they threaten manned systems or the dominance of pilots, Mahnken offers no proof. He cites no documents, staff summary sheets, internal memos, etc., that show senior Air Force leaders curtailing funds or delaying UAV development for these frivolous reasons. Mahnken makes a serious charge that strikes at the honor and integrity of an entire service. I hope he has something with which to back it up.

It is popular to portray the services as a bunch of myopic Colonel Blimps intent on protecting their turf and fighting the last war, even if that means increasing risk to our military personnel. But condemning all the services with a series of unsubstantiated assertions is simply not good enough.

As I write this, the United States is at war with terrorism. We will soon see if our military is up to that task. Mahnken seems to believe it will not be; I think otherwise.

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*Professor Mahnken replies:*

The thesis of my article was that while the Army, Navy, and Air Force have embraced the concept of transformation, “significant organizational barriers to the adoption of new technology, doctrine, and organizations exist. The services have been particularly reluctant to take measures that are disruptive of service culture” (p. 86). While the Air Force, for example, has made a number of significant innovations since the end of the Cold War—including reorganizing its air assets into expeditionary air forces, developing the global strike task force concept, as well as pursuing network-centric warfare and effects-based operations (pp. 93–4)—its support for UAVs has been lukewarm. This bears repeating, because Meilinger’s letter seriously distorts the thrust of my article. While I do not expect him to agree with me, I would have expected him to take issue with my argument, not a straw man.

Meilinger is simply incorrect when he writes that my article amounts to “a series of unsubstantiated assertions.” In fact, I provide two types of evidence to support my contention that the services have neglected unmanned platforms. First, one of the best ways to determine what an organization values is to see how it spends its money. In my article I note that the Defense Department spends ten times as much on manned combat aircraft in a single year than it spent on UAVs over the past twenty years. Second, I note two instances in which Congress intervened in the department’s management of UAVs because of the Pentagon’s perceived neglect of unmanned systems (p. 95). Meilinger may not find these facts compelling, but they are facts nonetheless.

Meilinger is correct when he points out the technical limitations of UAVs. On page 95 of my article I note that UAV technology remains short of its potential. Still, one wonders what technological and operational hurdles might have been surmounted years ago if the Defense Department in general, and the Air Force in particular, had devoted more money to developing and fielding unmanned vehicles.

Contrary to Meilinger’s assertions, my article does not “portray the services as a bunch of myopic Colonel Blimps.” Nor does it in any way “strik[e] at the honor and integrity of an entire service.” In fact, I argue that “it would be wrong to view the services as uniformly opposed to fundamental change. Rather, each service is split between traditionalists and elements who are enthusiastic about new ways of war.” In case he missed this passage in the text on page 96, it also appears in large italics in a text box on page 87. A similar statement appears on page 86. I can only conclude that he either did not read these passages or chose to ignore them.

Reasonable people may disagree over the extent of Air Force transformation or the value of unmanned systems. But Meilinger crosses the line between civil discourse and *ad hominem* attack. Closing his letter with language heavy in innuendo, he implies that anyone who questions the services' enthusiasm for new ways of war is unpatriotic or defeatist. Such a statement is unwarranted, unprofessional, and unworthy of further response.

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