



IMPOSING COSTS ON THE ENEMY

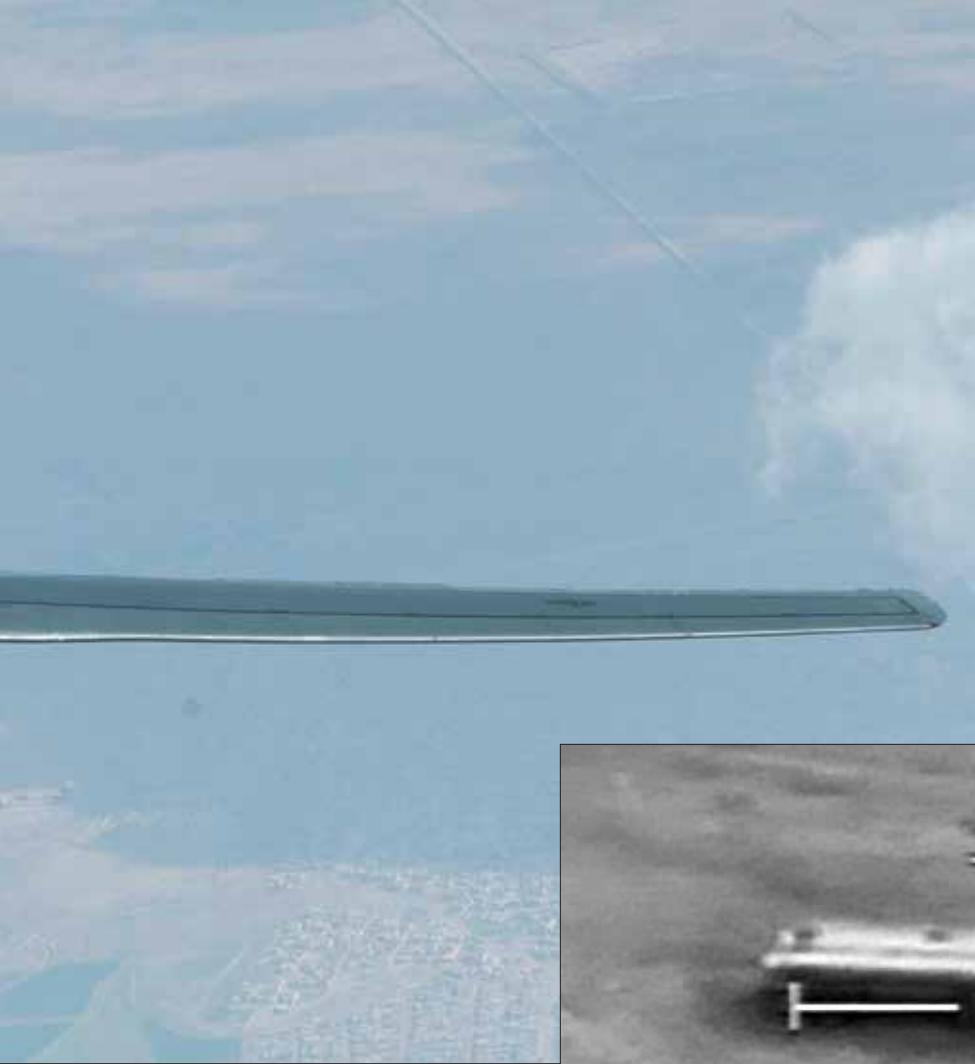
Different adversaries value different things. The Air Force can target them all.

By Jennifer Hlad

During a typical week of Operation Inherent Resolve, the US-led air coalition strikes dozens of targets in Iraq and Syria: wells, buildings, fighting positions, vehicles, and weapons. In January, the Air Force flew a pair of B-2 stealth bombers from Missouri to drop dozens of GPS guided bombs on a remote ISIS location in the Libyan desert. In April, the Navy fired 59 Tomahawk cruise missiles, costing roughly \$50 million, at a Syrian airfield. Later in April, an Air Force MC-130 delivered the Massive Ordnance Air Blast (MOAB) bomb against an ISIS-held cave and tunnel complex.

Are these wise uses of US resources? Perhaps not in a cost-vs.-cost comparison, but the US is not involved in total-war battles of attrition. Financial considerations are often secondary concerns for both America and its enemies in wartime, and airpower gives the US the ability to hit enemies wherever it is that they will really feel pain.

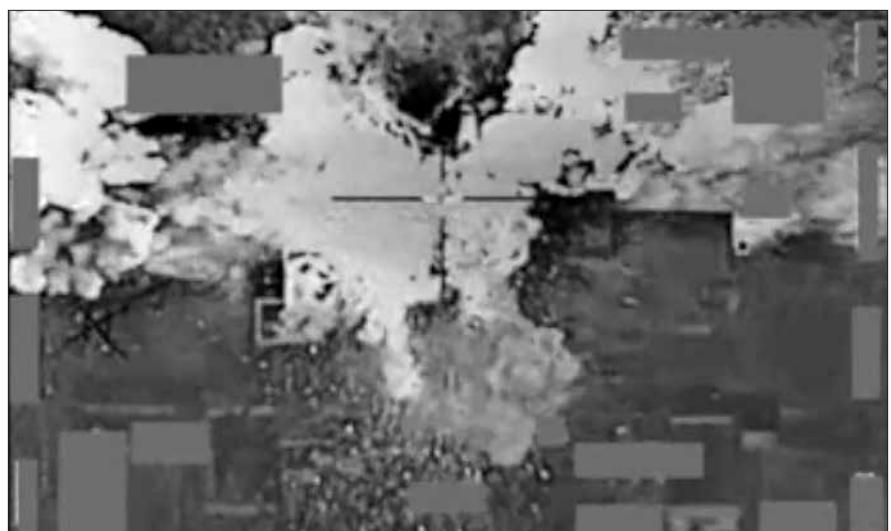
The idea is to “price your competition out of the marketplace of being able to even compete with you,” Lt. Gen. Steven L. Kwast, commander



A B-1B from the 34th Expeditionary Bomb Squadron over the skies of Syria in 2015. The bombers were conducting air strikes against ISIS during Operation Inherent Resolve.



An image from a DOD video shows a fuel truck in an aircraft targeting sight. Coalition air strikes destroyed ISIS fuel trucks near Abu Kamal, Syria, in November 2015 to degrade the terrorist group's oil revenue.



A DOD video image shows the aftermath of a coalition air strike destroying an ISIS cash and finance distribution center near Mosul, Iraq, on Jan. 11, 2016. Such attacks aimed to disrupt ISIS' ability to fund its operations.

and president of Air University, told *Air Force Magazine*.

Ideally, he explained, “when there’s a \$10 problem, ... you [try to] solve that problem for 10 cents and you force your competition to solve it for a thousand bucks.” Adversaries “will not behave badly if they know that there’s no way they can successfully counter you.”

The idea of imposing costs on the enemy—without incurring high costs in the meantime—is not new. Since World War II, the US has been “so unilaterally dominant economically ... that we have had the luxury of spending money and being effective,” Kwast said.

However, “as we’ve watched the return on investment starting to wane a little bit” in recent years, the Air Force has had to “get back to these basics” and develop its concepts, organizations, and processes anew to “think deeply about affordability.”

The risk is that the service tends to focus on the fight at hand and under-invests in over-the-horizon programs. It’s human nature, he said.

"Even the most brilliant people can fail if they are not given the resources to do everything they should be doing," he said.

Moreover, Kwast argued, the US government is designed to prevent drastic or rapid change unless there's a major crisis. There's little incentive to alter governance "when we are strong as an American society and when the American people do not have to really change their lifestyle."

Politicians, he pointed out, don't want to vote to close factories and surrender jobs in their districts if there's no pressing reason to do so.

"We can talk all we want about China acting badly in the South China Sea, or Russia acting badly by invading Crimea, ... but if you do not motivate the American political system to actually take risks and do something different, the tools of national power that come out of this military complex will not change, and you are forced to continue using the tools of the past," he said.

Is it worth it, though, to use a "\$15,000 bomb delivered by a \$100 million aircraft to destroy a \$20,000 truck?" asked retired Lt. Gen. David A. Deptula, dean of the Mitchell Institute for Aerospace Studies. That's the wrong way to look at the equation.

"The issue is, what was that truck about to do? Who was that truck carrying?" Deptula said.

Sometimes, the intrinsic value of a target is far outweighed by the impact its loss will have on the enemy. When coalition air strikes destroyed more than a hundred ISIS fuel trucks in late 2015, military spokesmen said the effort delivered a harsh blow to the terror organization's ability to fund its military operations. Strikes on cash storage and distribution sites were lauded for severely impairing ISIS' ability to pay its fighters.

Deptula believes that even being able to use a very expensive system to precisely attack a fairly low-level tactical target, anywhere in the world, "is imposing costs on potential adversaries, just simply having that capability."

It's not cheap, he said, "but in terms of imposing costs on adversaries, look [at] what we've already done."

In the 1991 Gulf War, Russia and China "saw ... what happens when the United States has unrestricted access to the aerospace environment of a particular nation." They learned from Iraq's disaster and "spent 25 years ...



continuing to build counters to ... our ability to achieve control of the aerospace," Deptula asserted.

The Air Force is working hard to turn the tables on enemy costs.

Kwast said that at Air University, students study the principles of innovation, which is also a study of bureaucracies.

He asked how "do you get a bureaucracy that tends to perpetuate the past—that has been successful—how do you get it to be adaptable so that it evolves?" When innovations are made, "then ... how do you organize so that your organization does not kill the innovation?"

The students look at how to design routine innovation "into permanency," Kwast said.

USAF is working to make its processes more strategic and is moving toward multidomain integration and command and control.

"We are really sitting on a very powerful moment in time," he said, where the US "has the potential ... of leaping ahead for the next number of years in ways no other [country] can, so getting back to these basics of innovating is really important and fun."

The US still tends to go to war in a linear way, he stated. Typically, if a



Back cover detail of an ISIS magazine. USAF must concentrate its operations on the key systems of ISIS.

contingency erupts somewhere in the world, the US sends troops to address it. In a networked world, though, the country that owns the network "can focus knowledge and power anywhere on that network with lightning speed" and can do it for multiple nodes for "very, very affordable prices."

Doing something at one node or 100 nodes of a network "does not have that exponential increase in cost," like the linear approach does, he said.

The Air Force is designing "a networked approach to the projection



SrA. Christopher Haynesworth, left, and SSgt. Daniel Eisenhart install a tail kit on a JDAM at Al Udeid AB, Qatar. Precise attacks on even a relatively low-level tactical target impose costs on adversaries; they know USAF has the capability to do it at any time.

of power" and to deliver on its five core missions, "so that we can more affordably apply airpower and power projection at many different places in the globe at once," Kwast explained.

Moving away from traditional ground-centric approaches to military problems is a strategy to impose costs on the enemy as well, Deptula said.

In Operation Inherent Resolve, he said, the US military approached the conflict as though it were simply resuming the effort underway before the 2011 US withdrawal: training Iraqi forces and providing air support so the indigenous forces can eject ISIS.

Unfortunately, that approach "fit really nicely" with ISIS' strategy, Deptula said, because the US focus "was on supporting Iraq, not eliminating the source of the Islamic State's ability to operate."

So what is the best way to impose significant costs? Kwast said leaders must first truly know their enemy.

"If you really understand them

WHAT IS THE BEST WAY TO IMPOSE SIGNIFICANT COSTS? LEADERS MUST FIRST TRULY KNOW THEIR ENEMY.



An aircraft engine lies before a demolished hardened aircraft shelter in Iraq after Operation Desert Storm. Russia and China learned about US capabilities from that 1991 war and have since been developing ways to counter them.

deeply, you know what they value, and you know how many resources they're spending doing certain things," he said. Then, "you find very, very cheap ways of taking away everything they value and everything that makes them effective."

That calculus must be done on every aspect of the conflict, he continued, "because if you've got a lot of money, and the United States of America is unilaterally dominant economically, you can affect your enemy. But it's easy to pick something that's convenient, and oftentimes it's very expensive."

Kwast said, "Real cleverness" is driving costs down to do more with fewer resources.

Still, he said it would be unfair to say the US military hasn't been innovative enough.

"The scientists and engineers out there in these silos of brilliance have all the tools to totally reinvent the way America projects power. And they could do it at affordable price points

that would give us competitive advantage over our enemies that would just water the eyes of the world," he said. "But permission is not given to do that [because such an approach] would disrupt all of the current massive programs" in ships, aircraft, satellites, rockets, and nuclear weapons "that really fuel an economy."

But by the same token, it would also be unwise to try to change overnight—because it would destroy the economy.

"Certain journeys need to take time," Kwast said. The prescription for winning the cost-imposition contest is "to adapt rapidly enough to stay ahead of your competition, but not so fast as to kill the patient, which is the American economy and the military-industrial complex." *

Jennifer Hlad is a freelance journalist based in the Middle East. Her most recent article for *Air Force Magazine* was "Behind the Scenes Against ISIS" in the April/May issue.