

Sum of All Wisdom

In late 2001, USAF was riding high. The Afghan war had turned into a triumph of advanced air and space systems and operations. It was at this moment that Gen. John P. Jumper, the new Chief of Staff, laid out a vision for airpower. Afghanistan was just the beginning. He prescribed massive "horizontal integration" of the power of USAF's air and spacecraft, allowing them to exchange data, directly and immediately, to yield "the sum of the wisdom" for commanders. This, said Jumper, was "the essence of transformation."

I came here today to talk about my two favorite subjects, and that is air and space [power] and how our airmen ... will combine their skills and their talents to bring the greatest asymmetrical advantage to those commanders whose job it is to win the war. ... This is what I think is the essence of transformation. ...

When air and space combine together in the right ways, we can target, we can be redundant, we can persist. We can find, fix, track, target, engage, and assess anything of significance on the face of the Earth. We can bring this to the joint fight in ways that no one else can. ...

It is our strength that we unlock the intellectual potential that resides in those who can think across the dimensions of air and space, of manned and unmanned. ...

Right now, I would argue, these are capabilities that exist in bits and pieces. It is our job to pull it all together, to be able to think in terms of integration. ...

Do you think that the guy on the ground, the special operator who is trying to put bombs on targets before they kill him, cares whether the coordinates arrive as a result of an air platform or a space platform? He does not. He wants the effect. And he is most grateful for those of us in uniform who can think across boundaries, who can think across capabilities, in a single word, who can integrate. ...

We are all wedded to our platforms and our programs. ... To an F-15 guy, every problem looks like a MiG-21. ... To a bomber guy, not many problems can't be solved with 105 Mk-82s. ... [Do] you know how many programs we have dedicated to integration in our Air Force? How much money is labeled against a program element that says integration? Do you know how much? Zero. Integration is left as a byproduct ... of the platform. ... What are we trying to do is to create an intellectual construct that will take us away from that. ...

One of them ... is what I call the horizontal integration of manned, unmanned, and space [capabilities]. Notice I didn't mention one platform or program. This horizontal integration of manned, unmanned, and space is designed to do one thing—I call it the "sum of the wisdom."

"Toward Air and Space Integration"

Gen. John P. Jumper, USAF Chief of Staff
Air Force Association National Symposium
Los Angeles
Nov. 16, 2001

Find the full text on the
Air Force Magazine's website
www.airforcemag.com
"Keeper File"

The sum of the wisdom of this horizontal integration will result in a cursor over the target. ... We won't have to go through tribal representatives that sit in front of tribal work stations to interpret their tribal hieroglyphics to the rest of us poor unwashed. We will do this with machine-to-machine digital interfaces. ...

The person sitting at the console doesn't know where the result came from. He or she doesn't care. Neither does that commander who is passing on that information to the warhead wherever it is, manned or unmanned, space-borne or airborne, that is going to destroy that target. ...

Today, if you are an F-15 driver, you are up there with the AWACS, and the AWACS says, "Eagle One, you've got a bandit, bull's eye, zero-four-zero for 40." You take your cursor in that F-15, you put it over that target, and you press the button. ...

[But with an integrated system] you don't have to run your mouths over the target and say, "Give me the air speed, give me the altitude," send a query out on the Internet, tell me what kind of airplane this is, watch the hourglass run down. You don't do that. The system understands the urgency. It says, "Altitude, heading, air speed, target, type." You put the dot in the middle of the circle, it flies you the perfect intercept. Without any prompting it has a conversation with Mr. AMRAAM missile down here on the missile rail and says "Mr. AMRAAM, you come off the rail, look right here, that is where the target is going to be." AMRAAM says, "Got it," and puts an envelope up on your head-up display: max range, min range, no escape range.

And for the fighter pilot who can't figure out any other way, there is a big flashing light right in the middle of the HUD that says, "Shoot! Shoot!" [audience laughter] That is for me.

Here is the question, gang: If we can do this in the tactical level of war, why can't we do it at the operational level of war?

