Agile Capability

By Gideon Grudo, Digital Platforms Editor

The Air Force is slow to innovate, knows it, and is trying to fix it.



he need for agility was raised repeatedly at AFA's September Air, Space & Cyber Conference.

Maj. Gen. Robert D. Mc-Murry Jr., then Air Force Research Laboratory boss, said requirements for new technology need to be driven by science, not intuition. "We drive requirements higher than we need to," he said, by setting demands at: "This is what we think we need to have."

If USAF instead anchors requirements in experimentation, it will start with a "more achievable" baseline and ensure higher success rates, McMurry said.

The Air Force's technology requirements need to be grounded in experiment-driven reality instead of intuition because the current reality is hampering the research lab's ability to advance its work. New technologies are arriving later and are proving more expensive than they need to be because of unrealistic requirements, a hypercompetitive contracting environment, and a culture that shuns mistakes at all costs, said McMurry, who took over at AFRL, located at Wright-Patterson AFB, Ohio, in May.

Just after the conference, on Sept. 23, he was nominated for a promotion to lieutenant general to become commander of the Air Force Life Cycle Management Center, also at Wright-Patterson.

Improving the capability development process is a priority on the Air Staff as well, said Jeff H. Stanley, USAF associate deputy assistant secretary for science, technology, and engineering, speaking at the conference. Enterprise capability collaboration teams launched in 2015 "reinvigorated development planning," he said, in an effort to "provide more agility and really, truly deploy innovative strategic choices."

"The purpose of an experimentation campaign isn't to produce a product, but to understand or answer a question or mature a [concept of operation]. I think we're on that path," said Stanley. For example, in the area of directed energy, the Air Force has a "flight plan we're following right now and hopefully that will lead to an analysis of alternatives and program of record downstream, based on this experimentation campaign we have ongoing."

MARRYING UP EXPERTS

On Sept. 29, USAF announced a new Air Force Materiel Command entity—the Air Force Strategic Development Planning and Execution Office—specifically established to be flexible and quick in living up to its name. Gen. Ellen M. Pawlikowski, AFMC commander, drove the creation of the office and said in a news release that it is poised to "marry up" operational combatants and doctrine experts from across USAF with acquisition and technology folks.

"The Air Force is aggressively pursuing a path toward strategic agility in our capability development activities," Jack Blackhurst, director of the new office, said in the release. "We are transforming into an agile enterprise to maintain—and increase—our edge in the emerging environment and leverage the full innovative potential in all our airmen." What exactly the office will be doing—its "experimentation campaign plans"—hasn't gotten final approval yet, and the office's budget is still tied up in congressional deliberations, so few details are yet available, an Air Force Materiel Command representative told *Air Force Magazine*. The office will be within the Air Force Materiel Command at Wright-Patterson.

Getting the military to be more agile isn't just an internal Air Force problem. McMurry told lawmakers on Sept. 28 that slow processes bleed over into relationships with industry, compounding the difficulty in getting revolutionary capabilities quickly into the field. Testifying before the House Armed Services Committee's emerging threats and capabilities panel, McMurry said AFRL's biggest impediment is the speed that it closes deals with industry partners.

"It doesn't matter that you're a lab; you're really focused on trying to make the same kind of quality decisions and preparations to put something on contract," he said. "Our researchers need to be competent at that, but we really need them to be better, ... to be researchers."

The new AFRL office's main focus is to address these sorts of challenges. According to the release announcing the Strategic Development Planning and Execution Office's creation, it is to "build in agility" and "truly innovative" strategy.

All that to say: The Air Force is modifying its structures and working to change its culture. USAF hopes this will allow it to more quickly develop and field the new capabilities that combat forces need.