

## State of the Air Force and Space Force 2023

*Training airmen to act more autonomously—and gearing up for more autonomous systems.*

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### Defense One

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The U.S. Air Force's year brought an unexpected first: an air-to-air kill by an F-22 Raptor. But the shutdown wasn't of an enemy fighter jet; instead, the Raptor brought down a suspected Chinese spy balloon.

The incident—and the subsequent downings of three more unidentified flying objects—drew attention to the security of United States airspace, the role the Air Force plays in national security, and above all, the potential threat from China.

It's a threat that's been top of mind for the Air Force for years, and while Chief of Staff Gen. C.Q. Brown says he doesn't see conflict with China as "imminent or inevitable," he does want the service to be ready, just in case.

"My goal is to be ready today, tomorrow, next week, next year, next decade. And set ourselves as an Air Force to have capability and capacity to be able to provide options for the President," Brown [said](#) during a recent event at the Brookings Institution.

That looming threat—as well as competition with Russia, which is flying [wingtip-to-wingtip](#) with U.S. jets in the Middle East—will continue to drive Air Force programs and policies in 2023 and beyond.

China is "trying to reshape the [international] order into their own image or their own liking," Brown said, adding that he pays attention to what they are doing "from a capability standpoint because I want to make sure we stay ahead of the threat. I can't predict what the [People's Republic of China] might do, or how they might execute. But I just want to make sure that we have all the capabilities, as much as possible, to provide options."

One way the Air Force aims to stay ahead is Brown's "[accelerate change or lose](#)" initiative. Introducing it in 2020, he [noted](#) that while the Air Force was fighting battles in the Middle East, "China and Russia have done things to accelerate and or move to impact our advantage. And so, our advantage is eroding, so that's why I say 'accelerate change or lose'."

Those changes include two linked concepts Brown calls "agile combat employment" and the "multi-capable airman." The idea is to create a "lighter, leaner, more agile" force with dispersed bases that can also operate from remote locations—like remote Pacific islands.

"We've gotten used to going to the Middle East where we have big bases that are already established, and you just show up," Brown said at the Brookings event. "We're going to go places potentially in the future where you're starting from scratch, and you can't bring everything. But how do you operate in that environment and be able to make decisions without having to call back to, all the way back up to the headquarters? That's what I want to instill in our airmen, that they have the confidence to do the things that their nation's asked them to do without having a lot of oversight."

In a future conflict, Brown wants airmen "to be confident that they can make decisions and do things at the lower level without having to come back and ask for permission. Because I don't have time to sign permission slips for everything we do. I want to provide intent and let them go execute. And they will probably do more than I ever imagined."

To that end, the service recently [dropped](#) the four-day BEAST exercise from its basic training and replaced it with a two-day exercise meant to simulate a deployment and test "multi-capable airman" skills. The Air Force is also overhauling its [force generation](#) and deployment cycle. The new 24-month cycle, with four six-month phases—including "available to

commit,” when a unit is either deployed or ready to go at a moment’s notice—is due to reach initial operating capability this year.

The Air Force’s 2023 [budget request](#) of \$169 billion—up \$13.2 billion from the 2022 enacted budget—was about transformational change. And Congress approved some of that change: after years of back-and-forth, lawmakers finally signed off on retiring A-10 Warthogs, though they blocked retiring F-22s, and prevented or changed the retirement of other aircraft including the B-1, F-15, and E-3 AWACS.

The FY23 budget also included funding for low-rate initial production of the new B-21 bomber, as well as more KC-46 tankers, F-35As, and EC-37B Compass Calls. It also funds production of prototype E-7 aircraft.

“I think we made progress” on the budget, Brown said. “And it’s because the environment has changed,” with Russia’s ongoing invasion of Ukraine and the increasing threat from China.

As for the 2024 budget, expect another significant funding bump as the service plans to launch several new programs. Service officials would not elaborate on those “new starts,” but Brown noted that a continuing resolution—“particularly a year-long continuing resolution”—would scuttle them and “give our adversaries a year to move forward,” while keeping the U.S. in place. “You can’t buy back time,” he said.

That budget request is also likely to include unmanned aircraft with greater capability, and the manning to go with it.

“We’re going down the path of collaborative combat aircraft,” Brown said. “To be able to fly with, not just the [[Next-Generation Air Dominance](#)], but also looking to see how we could bring that with the F-35.”

Looking at “future budgets” for “uncrewed aircraft,” Brown said, there is “the platform itself, there is the autonomy that goes with it. And there’s how we organize, train, and equip to build the organizations to go, and we’re trying to do all those in parallel....As you look at collaborative combat aircraft, it can be a sensor, it could be a shooter, it could be a jammer. But how does it team with a crewed aircraft, and could you operate it from the back of a KC-46? We’ll have E-7s eventually. Could you operate it from the back of the E-7? Could you operate it from a fighter cockpit? And we’re thinking to those aspects.”

Also expected this year: At least some details on the Air Force’s “Next-Generation Air-Refueling System,” a stealth tanker to “address the changing strategic environment.” The service published a [request for information](#) in late January that projects an analysis of alternatives in October of this year, with IOC slated for 2040.

On the Pentagon’s network-everything [Joint All-Domain Command and Control](#) effort, Brown said that while many people early in the process talked about “connecting every sensor to every shooter,” he has always felt “it was more directing the right sensor to the right shooter at the right time.”

Now, he said, the challenge is “each of the services that have invested in their various command-and-control systems, and how do you then align those? And the goal is not that I have to connect every airplane to every tank, for example, but how do I get my data off my airplanes” to a place where a ground commander or maritime commander can feed information into it and pull out of it, Brown said.

“If we have some level of commonality in how we move data, that is probably the key point, and I will tell you we are making a lot more progress” than when he took over as chief, he said.

A key part of it is going to be handling all the data, Brown said, “which is why the Space Force is so important. They’ll lay out that architecture.”

It’s not the only thing on the Space Force’s plate. The smallest service branch has stopped growing exponentially, adding just 200 guardians this year, but is now focused on the nuts and bolts of creating resilience and building a “combat credible” force.

Guardians must be able to “operate in, from, and through a contested domain,” Chief of Space Operations Gen. Chance Saltzman told reporters in a media roundtable in January.

“Just because we have the right systems in orbit, or the systems on the ground, doesn’t necessarily make it a ready force. The personnel have to be trained. We have to have operational concepts. We have to have tactics that are validated. The operators have to practice those tactics. We need intelligence to underpin how we’re going to intend to use those systems,” Saltzman said. “We don’t deliver technology to the joint force, we deliver forces. Forces require all of those components: equipment, weapons systems, trained personnel, operational concepts, tactics, intelligence.”

For 2023, the Space Force requested \$24.5 billion, almost 30 percent more than the previous year. It will ask for another increase this year, to help build an operational test and training infrastructure—which includes simulators, ranges, testing equipment, digital engineering, and more, the CSO said.

And rather than tailoring training to a specific threat, Saltzman said he wants to take a broader approach.

“For a given system, we know what the general threats are, whether they’re anti-satellite kinetic attacks against our systems, whether they’re [radio frequency] energy and jamming, all of the array of threats that are out there,” he said. “And so rather than focusing in very narrowly on a particular threat, [and saying] ‘this is this is the threat scenario I want you to train against,’ I want to have a lot of flexible options against all the threats, regardless of what the outcomes might be, or what’s asked of us.”

Saltzman doesn’t want to prescribe, for example, sending an Advanced Extremely High Frequency satellite to handle a satellite-communications jammer.

“Too specific. I want to say, ‘Hey, the 4th Space Operations Squadron is ready to address any threat to its mission,’” he said.

Still, Saltzman said, identifying China as a pacing threat provides a useful “landscape of threats” the U.S. might encounter, and there are space-related lessons to be learned from Russia’s invasion of Ukraine as well.

“Right out of the gate, we saw both sides attacking satellite operations to degrade command and control. We see a lot of GPS interference to degrade those kinds of capabilities. So clearly, if right out of the gate you’re trying to degrade those capabilities, you recognize that they are central to operations, that they are important to how a force fights in the modern environment,” he said, noting that the conflict has also shown that “space and cyber are inextricably linked.”

“Satellites in space are not useful if the linkages to them and the ground network that moves the information around that you get from satellites is not assured, is not capable, is not accessible,” Saltzman said. “I think it’s a reminder that...if we’re not thinking about cyber protection of our ground networks, that we may have a backdoor, if you will, to negate satellite operations without counter-satellite operations....There’s other ways to attack these systems.”