

Aerial Refueling



KC-46A

Doubts, Confusion Surround Air Force Next-Gen Tanker Plans **BY JAN TEGLER**

When the Air Force's fiscal year 2026 budget request finally appeared in June, significant funding for the Next Generation Air-refueling System — known as NGAS — wasn't included. That led many to conclude that the service had put on hold the concept, which included a potentially stealthy new tanker aircraft.

But in late July, an Air Force spokesperson told *National Defense*, "No, the NGAS concept was conceived and is being analyzed as a family of systems with many options and variations, including current tankers with survivability mission systems."

That's not how retired Gen. Mike Minihan, who served as the commander of Air Mobility Command until last September, understood NGAS.

"The initial concept as we created it was that NGAS was truly next generation," Minihan said in an interview.

"The JetZero platform is something I could look at as NGAS," he added, "something that could be a new tanker and also do jam and spoof and electronic warfare and decoy. That is next generation. Simply saying, 'Hey, we bought a new comms package and here's your new next-generation KC-46,' isn't NGAS."

Minihan was referring to JetZero's Z4 demonstrator, a blended wing body prototype aircraft the Long Beach, California-based startup has been developing since 2021. In August 2023, the Air Force awarded JetZero a four-year cost-sharing contract worth \$235 million to help fund development of an aircraft that could form the basis of a next-generation tanker. The company is aiming for first flight of the demonstrator in late 2027.

Further funding for the Z4 is not in the fiscal year 2026 budget, however. Instead, the service requested a modest \$12.9 million for continued

study of NGAS, a bump up from the \$7 million requested for the same purpose in fiscal year 2025.

"To be clear, we're spending more on Air Force bands than we're spending to invest in the next generation of aerial refueling or even the current generation when it comes to connectivity," Minihan said. "That's a big fat insult to the mobility community."

Asked for JetZero's reaction to the Air Force's decision to allow funding for the Z4 to lapse, the company's co-founder and CEO Tom O'Leary noted that JetZero passed critical design review in May on time and under budget.

The aerial refueling variant of the Z4 — designed to provide 30 percent better lift over drag of the all-wing design over similar-sized conventional airplanes — "would absolutely meet the needs and demands of the [Air Force] and greatly expand existing capabilities," O'Leary added.

The service offered no further explanation for its decision on the Z4, but in late July, Air Force Chief of Staff Gen. David Allvin revealed that the service would purchase up to 75 more Boeing KC-46As as part of its Tanker Production Extension program, foregoing a competition for a "bridge tanker" to replace more of the aged Boeing KC-135 fleet beyond the 188 Pegasus tankers currently on contract.

Minihan said he agreed with the Air Force's decision to buy more KC-46s, but only "because it's the devil we know." He pointed out that all of the deficiencies that existed on day one of KC-46 production are still being incorporated into the aircraft rolling off the production line.

He further observed that there are huge capability gaps between the Air Force's existing tanker fleet and its shrinking fleet of combat aircraft.

"You're on a second-generation tanker," he explained. "Or, to give the KC-46 the benefit of the doubt,

maybe generation 2.5, but not the leap in technology that happens in the fighters or the bombers. You're creating a force that's got almost a four-generation gap in capability between our newest tanker and our sixth-generation aircraft, B-21 and F-47."

Until early this year, some Air Force officials maintained that NGAS and the F-47 were intertwined.

In January, outgoing acquisition chief Andrew Hunter told *Breaking Defense* that analysis of NGAS was tied to the service's review of the Next Generation Air Dominance fighter initiated by former Secretary of the Air Force Frank Kendall.

"The realization that we had is, you can't look at these two things in isolation," Hunter said. "You need an approach to Next Generation Air Dominance that is supported by your approach to aerial fueling. And you need an approach to aerial refueling that complements the tactical force that you're buying, and enables it to carry forward the fight."

But Kendall had already cast doubts about NGAS, opining last November that the Air Force could not afford the F-47, Collaborative Combat Aircraft and the new tanker.

"I see this as a budget-driven decision, not a strategic decision," said Todd Harrison, a senior fellow at the American Enterprise Institute. "In the long run, I think this is something the Air Force wants and needs, but for the next few years, this is something

Air Force photo, JetZero illustration



they're going to have to live without. It has the long-term effect of delaying modernization and the fielding of new, more advanced capabilities."

Bryan Clark, a senior fellow at the Hudson Institute, said the Air Force's decision on NGAS is part of an intentional force design plan that would ultimately shrink its tanker and mobility fleets.

"The idea is [to] expand the uncrewed and bomber/F-47 forces and cut the traditional fighter force and its support to pay the bills in a flat budget environment," Clark said. "That all means eventually they can shrink the mobility fleet down to K-46, newer C-17s and C-130s."

Clark added that the Air Force is on a trajectory to "build a Mission Area 1 force of ground-based, runway-independent aircraft and surface-to-air drone and missile air denial systems. It will try to grow the Mission Area 2 pulse force of bombers, F-47, Collaborative Combat Aircraft and enough tankers for those missions."

Putting the question of whether the Air Force will pursue the force design plan Clark outlined to the Air Force resulted in a one-sentence response.

"The Air Force has no plans to decrease the size of its aerial refueling fleet," the service spokesperson said.

However, members of the Senate and House Armed Services committees are apparently concerned that the tanker fleet will shrink.

The addition of 75 KC-46As to

the 188 Pegasus tankers the service has already committed to would yield about 263 tankers, a little over half of the total number of tankers the service fields today. At the same time, maintaining the remaining KC-135 fleet is becoming increasingly costly and difficult.

Section 139 of the Senate Armed Services Committee's report on the fiscal year 2026 National Defense Authorization Act stated: "The committee recommends a provision that would direct the Air Force to reassign KC-135 tanker aircraft that are replaced by KC-46 tanker aircraft to existing air refueling wings with the ability to absorb a larger fleet."

Meanwhile, Section 121 of the House version of the NDAA would raise the floor for the Air Force's aerial refueling fleet to "not less than 504 aircraft beginning on Oct. 1, 2027."

Minihan said the Air Force's plans as indicated by its budget request are counting on an operational environment that defies reality.

"We will have to project power across vast distances of contested domains," he noted. "To think that the KC-46, which struggles to operate in the current environment along with C-17s and C-130s that were designed decades ago, can provide the longevity needed to be successful in a highly contested environment against near-peer adversaries poses more questions than it answers."

Without further Air Force fund-

ing for NGAS presently, Minihan contended that the "25x25" initiative he advanced in 2023, calling for 25 percent of Air Mobility Command's existing tanker and mobility fleets to receive connectivity upgrades that would increase their survivability and utility as communications nodes, is even more important now.

The Air Force's fiscal year 2026 budget request includes \$81 million in research, development, test and evaluation funding for Pegasus capability improvements, including the Block 1 Pegasus Advanced Communications Suite, study of a Block 2 version and Mobility Air Forces Connectivity.

The figure is far less than Minihan recommended. "I would be disappointed if I saw anything less than \$500 million for connectivity. That's the number I suggested as I left."

He added that the Air Force is considering a service life extension program for its KC-135s but argued that it must be focused on connectivity and upgrades like the KC-135 Drone Delivery Mechanism he proposed during his tenure.

"If you make [the service life extension program] about communication, connectivity and force multiplying capabilities, and transferring 135s to commercial providers that can operate them more efficiently and cheaply so you can focus on what's really next generation, then I'm willing to have a conversation on that," he said. "It's not a 100 percent solution, but it's better than a zero percent solution without a path to a new aerial refueling capability."

Queried about what a service life extension program would entail for KC-135s, the Air Force said it "will consider all requirements needed to sustain the KC-135 fleet until 2050-plus. The Air Force is focused on KC-135 airworthiness and modifications to maintain aircraft availability while adding capability for connectivity, communications and survivability."

The Air Force's contention that current tankers with upgrades are part of NGAS is a stretch, Harrison said.

"If they are now loosening that term to include some upgrades added on to legacy tankers, I think that means that, in effect, there is no plan for a next-generation tanker," he said. "There is only a plan to extend the life of past and current generation tankers." **ND**



Rendering of a blended wing body tanker aircraft