

SrA. Austin Toniolo inspects a C-17 engine at Dover AFB, Del. USAF's Chief of Staff says the shortfall in maintainer positions is the Air Force's No. 1 readiness inhibitor.

**The Air Force's maintainer shortage hurts readiness and will take years to fix.**

# Maintainer

**T**he Air Force's plan to end its maintainer shortage—the first step to restoring full-spectrum readiness—is underway, but planners believe balance will not be restored until 2019.

The multipronged strategy to reduce the current shortfall of 4,000 maintainers—increasing accessions while offering retention bonuses to experienced maintainers—relies on the service being allowed to implement its requested manpower increase, Col. Patrick T. Kumashiro, chief of the maintenance division on the Air Staff, told *Air Force Magazine*. USAF will be short even more maintainers if the force doesn't grow, because the number

# ntainer Misery

By Will Skowronski, Senior Editor

of maintainer authorizations is expected to increase from 68,000 to 70,000 by the end of 2021 as the F-35A fleet grows while maintenance-intensive legacy aircraft are kept in operation.

During his nomination hearing for Chief of Staff in June, Gen. David L. Goldfein said “manpower and specifically maintenance manpower” is the Air Force’s No. 1 readiness limiter.

“So your support for our increase in manpower is the No. 1 issue for us,” he told the Senate Armed Services Committee members.

## SEQUESTER AND THE GAP

The service’s maintenance manning level is the lowest it has been in more than 20 years, Maj. Gen. Scott D. West, director of current operations on the Air Staff, testified before lawmakers in July. Between 2004 and 2015, Active Duty maintenance manpower decreased by 17,000 airmen, or 21 percent of the total, while the number of aircraft was only reduced by 11 percent.

In February, Lt. Gen. John B. Cooper, deputy chief of staff for logistics, engineering, and force protection, told lawmakers the service’s attempt to solve the \$8 billion sequestration problem compounded the maintainer gap.

“The first place that we went to, the easiest place to go to get dollars that quick, that soon, is the personnel account,” he said, and the Air Force “unfortunately” began bringing in too few maintainers.

The maintainer gap is most acute among those supporting the service’s fighter portfolio. Historically, USAF has aimed for a 95 percent manning rate, but as of July, only 89 percent of positions shredded to the fighters were manned.

“When you look at anything below 90 percent, we start having concerns,” Kumashiro said.

The F-16 fleet has been hit particularly hard; only 75 percent of the experienced five-level positions—held by senior airmen and staff sergeants who directly turn wrenches and generate sorties—are filled. Kumashiro attributed the F-16 shortfall to the demands of deployment and overseas rotation requirements.

“That operational tempo has an impact on overall retention,” he said.

Because of the shortage, the service has been unable to generate the number of sorties needed to maintain readiness.

Ensuring deployments are fully staffed has left home stations shorthanded and unable to fully utilize the available iron for training sorties. Wing commanders have told service planners they are generating 30 percent fewer sorties, per squadron, per day at home, Kumashiro said.

Fewer sorties has meant less training and left the Air Force unready to go toe-to-toe with a near-peer adversary.

“I commonly say it takes two things to make a fighter pilot,” Lt. Col. Jason Cockrum, who manages career fields for the combat air forces, told *Air Force Magazine* earlier this year. “One is airframe, so you need jets. And the other is maintainers. And you could really apply that beyond the fighter community as well.”

“If called upon to fight state-to-state, an associated training delay would pose a significant risk to mission,” West stated in House Armed Services readiness subcommittee testimony. “Conversely, deploying airmen in their current readiness state to fight ... would significantly increase the risk to success.”

Col. Stephen C. Scherzer, commander of the 52nd Maintenance Group at Spangdahlem AB, Germany, said when 12 of the base’s F-16s were deployed to Southwest Asia in April, the package was fully manned—but the jets that stayed behind couldn’t be flown enough to meet home-station readiness requirements.

Between October 2009 and June 2016, he told *Air Force Magazine*, his unit has seen a 7.5 percent decrease in mission capable rates. It doesn’t help that the aging F-16s have required more and more maintenance to remain airworthy.

“We’ve had aircraft that sit down longer times waiting to be fixed,” Scherzer said. “A lot of that has to do with parts availability, but then a lot of it has to do also with we just don’t have the folks and some specialties.”

Scherzer said he actually had to limit his airmen’s hours because the standard maintenance shift had become 12 hours a day, five days a week, with possible weekend duty, leaving maintainers working up to 12 days straight sometimes. Roll calls, paperwork, and other responsibilities were handled after hours, meaning each workday really lasted between 13 and 14 hours. The hours were reduced to an all-encompassing 10 hours a day after it was clear an airman’s home life, physical conditioning, and study time

were being impacted, creating an unsustainable strain.

The effect of the shortage is magnified by a lack of administrative support at the bases. Just before retirement as Air Force Chief of Staff, Gen. Mark A. Welsh III acknowledged that leadership might not have fully anticipated the consequences of cutting the tail out of squadrons to keep the tooth during the last 25 years of downsizing. Airmen, Scherzer said, have to pick up extra jobs like approving travel vouchers or being a physical training monitor.

“Those bills just have to be paid in order for the base to run. And that’s had an impact everywhere,” he said.

Unit surveys show “our folks are tired,” a sentiment Scherzer is sure is reflected across the force.

USAF photo by A1C Kevin Tammenbaum



USAF photo by Capt. Elias Zanti



To make up for the increased downtime, the 52nd MXG has looked for innovative ways, including “hotpitting,” to get the most out of the available iron, Scherzer said. During a hotpit, a pilot lands, refuels, and takes off again without shutting the engine down or turning the aircraft over to the maintenance crew, allowing one pilot to get two sorties on the same day.

“That helps us in that we’ll only have to generate that aircraft once,” Scherzer said. “So we’re max utilizing the aircraft, if you will, more often than we had to do before.”

But the quick turnaround is not optimal for training purposes.

“We have to do that to generate the sorties, but that pilot now doesn’t get a chance to debrief after his first sortie, and he goes back up again,” Kumashiro said.

Scherzer said the 52nd MXG also cross-trains maintainers to cover any seams that open up, particularly while a portion of the unit is deployed.

“We have to ask folks to step out of their comfort zones and step out of their career fields,” he said, and it “takes longer to do things.”

While facing shortfalls in other specialties, equipment, and infrastructure, the maintainer shortage is the first readiness hurdle the service needs to clear, West explained to lawmakers.

“Since development of human capital takes the longest to complete,” he said, “we must first address personnel shortfalls in critical skills.”

USAF can’t reduce the shortage in one fell swoop because units can only absorb and train so many raw recruits.

Instead, the service plans to fill the gaps incrementally.

“We have to have time to develop the force to ensure that we have experienced maintainers to support our complex weapons systems. ... We cannot solve it in one year,” Kumashiro said.

In Fiscal 2016, the service aimed to bring in about 8,300 maintainers, almost 3,000 more than the 5,500 that were accessed in Fiscal 2014, but still not as many as it needs in the long run. Planners believe between 8,000 and 8,500 accessions a year for the next five years will close the gap.

“Based on our forecasting today, ... just on pure manning numbers, we should be healthy” by 2019, Kumashiro said. “Now the caveat to that is we are still very concerned about the experience levels



ANG photo by SrA. Shane Karp



**Above left:** A1C Obadiyah Ivens prepares the cockpit of an F-16 at Nellis AFB, Nev., for a Green Flag mission. **Above right:** SrA. Jonathan Enos inspects the wheel assembly of an F-16. The tire was leaking air and needed to be replaced. Only 75 percent of USAF’s Experience Level Five F-16 maintainer positions are filled. **Left:** TSgt. Kevin Brown and A1C Collin Blackburn, propulsion technicians, guide an engine into place on an F-15E during Red Flag Alaska at Eielson AFB, Alaska.

that we’ll have during that time frame. ... So to an extent, we’re still going to have some level of risk. Even though we may have the overall total numbers, we may not have the right workforce mix that we need to have.”

Bringing on so many raw recruits creates its own challenges, even if done incrementally.

“The same folks that we’re asking to generate the sorties, are the same folks that we’re asking to give [on-the-job training] to these new accessions, so that’s a challenge that we’re going to have to face as a wing and as units out here,” Scherzer pointed out, “and we’re starting to figure out how we’re going

SrA. Kyle Lacy, a crew chief, places probe covers on an F-16 during a surge operation at Misawa AB, Japan.



USAF photo by A1C Jordyn Fetter

to do that piece right now as accessions come in, so it's going to be interesting."

His airmen are nevertheless happy to see "those accessions coming on because they know that in five to seven years, things are going to be a lot rosier than they are now," he said.

Planners are exploring how to leverage technology—including iPads and software applications—to optimize training opportunities. But the use of how-to tutorials won't change training requirements, including the need for hands-on work under the guidance of seasoned maintainers, Kumashiro said.

To that end, the Air Force began offering retention bonuses to experienced maintainers in 2015 to retain their knowledge and ability to train new ones. Today, the service offers 43 Air Force specialty codes—largely flight line maintainers—an average bonus of \$50,000 to stay on another four to six years.

"We're trying to retain our most experienced maintainers to reduce the normal attrition that would occur based on people deciding to leave the Air Force," Kumashiro said.

Planners view a take rate above 50 percent as a positive, and in Fiscal 2015, more than 60 percent of those eligible took the bonus.

But finding the right maintainer balance is complicated by the need to maintain legacy systems while fielding the F-35—which alone will require an additional 40 maintainers a month to keep up with the rollout schedule of two aircraft a month—and other new platforms.

"We can't just field the F-35 and put 4,000 18-year-olds on the F-35. We've got to be able to transition our experienced workforce from some weapons system," Kumashiro said. "We need to have stability in our force structure so we can plan to support those requirements. And so at some point in time we do have to transition from our legacy weapons systems over to ... the F-35, the KC-46, the B-21. ... We have to be able to do that."

## SUPPORT NEEDED

But stability has been hard to come by. Congress threw a wrench in USAF's plans when it rejected the service's proposal to retire the A-10 and transition those maintainers to the F-35.

Uncertainty "creates a lot of turbulence in trying to manage our force and the people to support those weapons systems," Kumashiro commented.

To mitigate the effect of the shortage while incrementally rebuilding the force, the service is turning to contractors, the Air Force Reserve, and the Air National Guard for help.

"We would love to be more agile in the process, but developing your workforce takes time, so we need support," Kumashiro said.

Starting in Fiscal 2017, contractors will fill about 1,100 maintainer positions held by Active Duty airmen in training units at Davis-Monthan AFB, Ariz., Little Rock AFB, Ark., Nellis AFB, Nev., Eielson AFB, Alaska, Andersen AFB, Guam, Holloman AFB, N.M., Kirtland AFB, N.M., Peterson AFB, Colo., and Rota

AB, Spain, and at avionics units at Eglin and Tyndall in Florida.

The contractor solution, which will run \$100 million a year for three years, "is not ideal," Kumashiro said, "but we really had no other choice." He noted that USAF used those positions to allow overseas maintainers to rotate back to CONUS.

To further ease the transition, the service resequenced the F-35 beddown schedule, sending aircraft to Burlington Arpt., Vt., in 2019, instead of to Eielson, which will now receive them in 2020. An Active Duty F-35 maintenance unit at Luke AFB, Ariz.—currently manned by contractors—will transfer to the Reserve in 2017. The moves allow the service to rely on Guard and Reserve experienced maintainers while training its new accessions.

"The Guard and Reserve clearly have been just great partners in trying to help us solve the Active Duty maintenance manning shortfall," Kumashiro said. "There's no way that we could do this on our own."

Kumashiro believes Congress understands the challenges the Air Force faces and wants to help, but only budget stability will allow the service to plan how to structure its force. For now, planners are carefully optimistic about their multifaceted plan to reduce the maintainer shortfall and, in the end, increase readiness.

"We have a good way ahead that minimizes the readiness risk, but we still have major concerns," Kumashiro said, adding, "I think there is light at the end of the tunnel." ★